

# STRING FIGURES FROM THE MARQUESAS AND SOCIETY ISLANDS

BY

WILLOWDEAN CHATTERSON HANDY

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## DISCUSSION

There are only a few districts in the Society Islands, and none in the Marquesas, where the natives are now too sophisticated to amuse themselves with the making of string figures (cat's cradles, as we call them). This old pastime has withstood the newer interests as well as the ennui of today. Almost everywhere in these two groups of islands, children carry loops of string or stripped pandanus leaf around their necks, ready for an emergency; and men and women of all ages, when a loop is put into their hands, begin to thread their fingers through the mazes of some half-forgotten pattern. I have made many friends through the loop of string which I carried about from valley to valley on the eleven islands which I visited, and all conditions of people have taught me the figures presented in this paper. Children in their school yards crowding close to show another and another pattern when I had demonstrated my ability to make one; young women idly busying their fingers while they nursed their babies; old women chaffing each other about this or that old familiar procedure; young men nonplussed at my interest but dextrously and vigorously adding their accomplishments to my collection; and old men chuckling over the jingles that are intoned with the sliding figures: all these and many more contributed to this group of Polynesian string figures.

In the Society Islands no greater significance was ever attached to the making of these patterns in string than is manifest at the present time, though the interest in inventing and playing with them must have been considerably greater formerly. But in the Marquesas, the fact that they were once made by professionals for patterns for lashings of sennit (*pu'u kaha*) seems to have given them a dignity that still endures. The Marquesans take them a little more seriously than do the natives of the Society Islands. There is even a fragment of a legend still remembered by Marquesans regarding the origin of the *pehe*, as the natives call these figures, one Aka being said to have gone to an island called in the story "Kaukau o meia,"

where he was taught the *pche* and the manufacture of the cord from the fiber of the banana tree with which to play them.

Although today there is no association in the native mind of definite figures with their ancient use as patterns for the lashings of canoes, coffins, house posts, adzes and the like, still there is interesting circumstantial evidence regarding at least one of them (*na humu*, fig. 14, *b*). The sacred chant called *oho au o Motu-haiki*, which was recited for the sacred first-born, commemorates the pattern once used for the binding of the child's sacred adz:

Put it on the handle,  
Fix it well on the crooked *mī'o* stick,  
Bind it with black and red sennit spun of fine fiber,  
Bind it with the binding of Tanaoa.

The term used for "the binding of Tanaoa" is *na humu o Tanaoa*. *Humu* means both "binding" and a kind of small fish which was associated with Tanaoa in legend, so that there is evidently here a play on the word. The *ha'anaunau*, or metrical chant, which is recited with the pulling of the string figure called *na humu* (p. 35) refers definitely to these small fish. That this string figure was the original pattern for the *na humu*, or binding of the sacred adz, may be hazarded, I think, because of several contributing bits of evidence. There is a Tahitian figure which is identical with this Marquesan *na humu*, and its name there is significant—*opahi* (axe) (fig. 30). Furthermore, on Maupiti of the Society Islands there is made a figure called *na mau arii o Opoa* (the binding of the chiefs of Opoa) (fig. 38*c*), whose procedure through the moves preceding the final extension of the figure (Nos. 1-10, pp. 76-78) is identical with that of *na humu* and *opahi*. It may be due to my misunderstanding or due to a mistake of the player who taught me, that the tenth move was not made the final one and the *mau*, or binding of the chiefs, presented in exactly the same form as the other two patterns. The shape of this pattern—two diamonds point to point—is a possible outline for the lashing of an adz.

The figures of both the Marquesas and the Society Islands may be placed in the "Oceanic" group of cat's cradles, according to Alfred C. Haddon's classification.<sup>1</sup> To this group belong also the American Indian string figures; while both European and Asiatic figures belong in the "Asiatic" group. The category is determined by the type of opening position and the following move. In the usual opening position of these Polynesian figures, the loop lies around the little finger and the thumb of each hand and crosses the palm between them. (See Pl. I, *A*.) In the follow-

<sup>1</sup> Jayne, Caroline Furness, *String figures*, p. xii, New York, 1906.

ing move, the index fingers pick up the strings crossing the opposite palms (Pl. I, *B*). Contrariwise in the "Asiatic" group of figures, the initial position for the loop is across the back of the hand and the crossing loops are picked up by the middle fingers.

From the point of view of the technique used in making string figures, those of the Marquesas and the Society Islands may be classed as a unit. Most of them are made by one person who twists, interweaves and exchanges loops upon the fingers of both hands, almost always performing the corresponding moves on the opposite hands simultaneously. Some are made by two persons who supplement each other's moves. Some are made by winding the cord around the fingers, arm, or foot in a manner apparently complicated but unravelling at a single jerk—and these seem to be more common in the Marquesas than in the Society Islands. Also in the Marquesas are what may be called woven figures (figs. 9, 24), made upon the fingers of one hand which act as pegs for the weaving.

Of the thirty figures and their derivatives collected in the Marquesas, and the twenty-five in the Society Islands, only eight may be said to be corresponding figures: the Marquesan *tukii kea* (fig. 1) and the Society Island *Rurutu* (fig. 27); the Marquesan *koukape* and its sequence (figs. 12, *a, b, c, d*) and the Society Island *firi rau anani* with its sequence (figs. 36, *a, c, d, e*); the Marquesan *na humu* (fig. 14, *b*) and the Society Island *opahi* (fig. 30) and *na mau arii o Opoa* (fig. 38, *c*); the Marquesan *Tohiu* (fig. 21, *a, b, c*) and the Society Island *ioio* (fig. 44); the Marquesan *Vaipae* (fig. 22) and the Society Island *ma'o* (fig. 43); the Marquesan *hahaua* (fig. 23) and the Society Island *i'a*; the Marquesan *kamo* (fig. 25) and the Society Island *tuna riro* (fig. 45); and the Marquesan *te fa'e no Tonahei* (Pl. II, *B*) and the Society Island *te fare no Oro* (Pl. IV, *B*). Only two of these are absolutely identical in method, procedure, and result: *Koukape* and *firi rau anani*; *hahaua* and *i'a*. In the other paired figures, save *kamo* and *tuna riro*, *Vaipae* and *ma'o*, *te fa'e no Tonahei* and *te fare no Oro*, diversity of technique accomplishes in the end an identical figure. But *kamo* and *tuna riro*, being made on different hands, are reversed. In *ma'o*, a slight difference in the fourth move (p. 86) complicates the final result in the Society Islands figure; and a different procedure in the last half of *te fare no Oro* (pp. 91, 92) evolves a figure which upon close examination proves to be unlike that of *fa'e no Tonahei*.

The typical moves, however, are identical in both the Society Islands and the Marquesas and the usual method of accomplishing them is the same. A few cases of diversity of method may be observed in some of the corresponding figures just mentioned. Note how the familiar sequence of

Nos. 4, 5 and 6 of the Marquesan *tukii kea* (pp. 11, 12) is accomplished in Nos. 5, 6, 7, 8, and 9 of the Society Island *Rurutu* (pp. 57, 58). Compare the way in which the second player takes the figure off the hands of the first player in the Society Island *ioio* (No. 9, p. 88) with the manner of this exchange in the Marquesan *Tohiu* (Nos. 10, 11, 12, p. 47). Make a similar comparison of the first three moves of the Marquesan *kamo* (p. 51) and the first four of the Society Island *tuna riro* (p. 89). Note also how different methods accomplish the same results in the first three moves of *fa'e no Tonahei* and *te fare no Oro* (pp. 54 and 91) and in the sequence of Nos. 7, 8, 9 of *fa'e no Tonahei* (p. 54) and the corresponding sequence of Nos. 6 and 7 of *te fare no Oro* (p. 91).

A study of the patterns made in both the Society Islands and the Marquesas, reveals them as of several distinct types: those which are stationary and of fixed design; those which progress from pattern to pattern more and more complicated in design or simpler and simpler, some of these continuing endlessly in a cycle of changes; those which slide back and forth with the pulling or pressing of a string; those which are made by two persons and extended between them; catches and trick figures which disappear at a pull; and three-sided figures (Pls. II, III, IV). In giving the directions for making these Polynesian figures, I have grouped them according to this classification as far as possible, though some of them belong in two categories.

The general name for string figures in the Marquesas is *pehe*; in the Society Islands, *fai*, the same word that is used for the meshes of the sorcerer's net. (Cf. Hawaiian *hei* and New Zealand *whai*.) The individual figures are named for a wide range of subjects. Among the animate creatures which give their names to string figures are the *toake* or phaeton bird (fig. 8), the *halaua* or ray fish (fig. 23), the small *humu* fish (fig. 14, *b*), the *kocc* or eel (p. 52), the *houu* or turtle (figs. 36, *d, c*), the *mo'o* or lizard (fig. 35), the *ioio* fish (fig. 44), and the *ma'o* or shark (fig. 43).

Most figures suggest the animal form. This is also true when names are derived from objects of daily use, such as *piri kooka*, or the attachment of the breadfruit net (fig. 4); *te vaka*, the canoe (fig. 10, *b*); *koha tua*, the horizontal bamboo which supports the back rafters of a house (fig. 14, *a*); *ipu tiare*, a flower bowl (fig. 36, *c*); *opahi*, or axe (fig. 30); *apoo tioo*, or the hole in the ground for storing breadfruit paste (Pl. IV, *A*); likewise *apoo mahai ahaana*, or a great hole for the storage of breadfruit paste (Pl. III, *B*).

Geographical features are also commemorated in patterns suggesting their general outlines, such as Uahuka, an island of the Marquesas (fig. 5);



Moua Puta, a mountain on Moorea with a hole in it, or its variant which refers to another hole in the ridge above the valley of Tautira, *te puta Vai Ami* (fig. 32); *a mahara Raiatea*, to divide Raiatea into fours (fig. 28); and *a mahara Taravao*, to divide Taravao into fours (fig. 29), both of which refer to divisions of these places into two groups of four districts each.

Mythological allusions occur frequently in the naming of the figures. Some of these call to mind legendary objects whose shape is suggested by the string patterns: *ipu ava Akau*i suggests the kava bowl of an old hero, Akau*i* (figs. 12, *b-d*); *Fa'e Papa*, the house of Atanua, the wife of Atea (Pl. II, *A*); *fa'e no Tonahe*i, the house of a legendary heroine (Pl. II, *B*); *te vaka no Hai*, the canoe of the hero Hai (fig. 10, *b*); *te fare no Oro*, the house of the god Oro (Pl. IV, *B*); and *tairi raa o te hope Ori*, which refers to the back lock of Ori which flew about when he turned his head (fig. 38, *b*).

Other allusions seem to have no concrete reason for connection with the figures. Such are *pua'a vaevae vau*, the pig with eight legs (fig. 9); *Mata-iki*, or the Pleiades (fig. 24); *te aanui manamana o Tafai*, the many routes of the hero Tafai, who came to the branching of the roads and knew not which route to take (fig. 11, *b*); *O Pua*, a legendary woman (fig. 11, *c*); Tohiau, a hero of the old tales (figs. 21, *a, b, c*); *te tumu o te Papa*, the basic rock level of the creation myth (fig. 37, *a*); *na ofai rorora i Hamau*, a wonder stone on Maupiti (fig. 38, *a*).

Most of the sliding figures are given names descriptive of the movement they resemble in the native mind. *Taata ino* (bad man) (fig. 42) is very evidently a missionary term substituted for words of erotic significance. A similar attempt seems to have been made in the Marquesas in supplanting *hope oni* with *kape honi* (soldier kiss) (fig. 11, *a*), but for the most part such terms as *hope puau* (fig. 16) and *u tami* (fig. 39) persist, though they and their accompanying chants are repeated shamefacedly or omitted altogether by the younger people. There are, however, many other kinds of movements imitated in the sliding figures. *Kooi ui'a* (lightning) (fig. 20), as its name would indicate, imitates the flashing of lightning; *kamo*, thief (fig. 25), the catching of a thief; *koe*e, eel (p. 52), the slipping of an eel through the fingers; *ua te tiare*, blooms the tiare flower (fig. 34), the unwinding of that blossom as it opens; *tuna riro* (fig. 45), the sliding of an eel into a pool from whence it cannot escape; *tuare* (fig. 41), the movement of the arms of a fisherman on the reef defying the waves in a spirit of bravado.

What I believe to be an interesting instance of missionary influence in renaming figures occurs in the one called in the Society Islands *firi rau*

*anani* (plait of orange leaves) with its sequences *ipu tiarc* (flower bowl), *honu tane* and *honu vahine* (male and female turtle) (figs. 36, a, c, d, e). In the Marquesas, it is known as *koukafe*, with three forms of *ipu ara Akaui* as its sequences. *Koukafe* has old-time magical significance, since it is the name of a membrane in the intestinal cavity (mesentery) and the name of a fish that is given as a medicine to a woman who had just borne a child. From the point of view of the missions, such a superstitious practice should not be brought to mind even by the name of a game, nor should the use of kava, the stupefying beverage of the ancients, be so commemorated. *Koukafe*, or its equivalent Tahitian name, became innocuously and meaninglessly a "plait of orange leaves," and the kava bowl of Akaui was transformed into the "flower bowl," followed by two "turtles" named for other figures quite differently made but similar in appearance.

The following figures were collected not merely to record certain Polynesian varieties of an interesting play common to all people, but fast passing from memory, but also in the hope that correspondences and identities with string figures of other parts of the world might be uncovered, which will be of ethnographic value. These patterns handed down from generation to generation may very often offer sound data for determining past cultural relationships. A survey of Jayne's study<sup>2</sup> reveals several correspondences that may be significant in tracing the migration of these Polynesian people. Compare, for example, "Bagobo Diamonds"<sup>3</sup> found in the Philippines with the Marquesan *Tohiau* (p. 45) and its sequences, which are identical with the sequences of the Caroline Islands "Turtle" called "Ten Times."<sup>4</sup> In this connection, it is interesting to note that the Polynesian sequences of the *Tohiau* spring from a figure identical with the Philippine Island "Bagobo Diamonds," for this verifies Jayne's belief that she had seen the sequences follow the Philippine figure as well as the "Turtle" from the Carolines. Other correspondences are to be found in the figure called "A Well,"<sup>5</sup> from the Loyalty Islands (also from Torres Straits), and the Society Islands *apoo mahai ahaana* (p. 76); the Caroline Islands catch<sup>6</sup> and the Marquesan *kamo* (p. 51); the Caroline Islands "Ten Men"<sup>7</sup> and the Marquesan *koukafe* (p. 29) and the Society Islands *firi rau anani* (p. 67); likewise the figure from the Western Carolines, New Zealand, and Queensland called "A House"<sup>8</sup> and the Marquesan *hahaua*

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<sup>2</sup> Op. cit.

<sup>3</sup> Op. cit. p. 43.

<sup>4</sup> Op. cit. p. 271.

<sup>5</sup> Op. cit. p. 85.

<sup>6</sup> Op. cit. p. 142.

<sup>7</sup> Op. cit. p. 150.

<sup>8</sup> Op. cit. p. 200.

(p. 48) and the Maupiti *ʻa*, which are identical with it except for the final extension of the ridge pole.

Aside from this larger usefulness, this collection may prove entertaining, as I have given the directions for their making, I think, clearly enough for anyone to follow.

## KEY TO PRESENTATION OF FIGURES

In describing the procedure in the manufacture of the various string figures which I learned in the Marquesas and the Society Islands, I have used the vocabulary adopted by Rivers and Haddon.<sup>9</sup> The back of the hand and fingers is referred to as the dorsal side; the palm, as the palmar side; so that a string or a loop is said to lie on the dorsal or the palmar side of the hand or a finger, is picked up on the dorsal or the palmar side of a digit. The little finger side of the hand is called the ulnar side; the thumb side, the radial side; so that strings are said to be ulnar or radial according as they lie on the side of a finger towards the little finger or towards the thumb. Similarly, the direction of the rotation of a hand or a finger is designated as in the ulnar or in the radial direction, according as it describes an arc or a circle starting towards the little finger side of the hand or towards the thumb side. Likewise the direction of the twisting of a loop is ulnar or radial. When there is more than one loop on a digit, that lowest, that at the base, is spoken of as the proximal loop; the highest, that near the tip, as the distal loop. There may be a proximal ulnar string on each finger, as well as proximal radial string; a distal ulnar string and a distal radial string. Furthermore, the direction of entering a loop or of picking up a string may be from the proximal, underneath, or from the distal, above; or, as I sometimes express it, the move may be on the proximal or the distal side of the loop or the string.

It was interesting to find on the island of Maupiti in the Society Islands, a native vocabulary for the major types of moves: *e fai* is the direction for taking the usual initial position (Pl. I, *A*), the loop lying around the ulnar, dorsal and radial sides of the little finger of each hand, across the palm, and around the ulnar, dorsal and radial sides of the thumb. The usual progression from this position (Pl. I, *B*) is indicated by *e tui*, i.e., the picking up of the opposite palmar string on the dorsal side of each index finger. *Taviri*, which means literally to twist, wind, or turn, is used to describe any form of rotating or twisting movement either of the digits or the strings. The direction for picking up a string or a loop on the dorsal

<sup>9</sup> Freire-Marreco, Barbara, Notes and queries on anthropology, edited for the British Assn. for the Advancement of Science, 4th ed., London, 1912.

side of a finger is *c pana*: for lifting the proximal thumb loop with the mouth over the tip of the thumb and over the distal thumb loop and dropping it between the thumb and the index finger is *c iti*: for withdrawing a finger from the figure, or removing a loop from one finger to another, or exchanging loops between fingers, is *c tu'u*. *Iriti* is also used to indicate the removal of a loop from one digit to another. To pull a string down on the palmar side of a finger is *taumc*; and to wrap a string around a finger is *taamu*. In illustration of the definite use of these terms, I have inserted them in parentheses in the directions for making the figure found on Maupiti, called *apoo mahai ahaana* (pp. 76-80).

Photographic reproductions of the actual string figures made in black string and mounted on cardboard accompany these directions. These figures appear from the maker's point of view, with the digits on which the final pattern is extended indicated alongside their respective loops. Two views of sliding figures are often reproduced, one open, one closed by the pulling of a loop or a string. Dissolving figures and several trick figures (*koccc*, p. 52; another trick figure, p. 52; *amatara*, p. 90) were impossible to represent in their final stage, since they disappear with a pull of the string; but the three-sided figures which were impossible to mount on cardboard were photographed as held on the hands. (See Pls. II, III, IV.)

The figures which are moved by pulling or pressing upon certain strings would not be complete without their accompanying metrical chants, called in the Marquesas, *ha'anaunau*, in the Society Islands, *patautau*. The native humor, strong rhythmic sense, and cryptic allegorical allusions combine to make these jingles delightful to listen to, but almost impossible to translate. The humor, usually too crude to be tolerated by our standards, need not be translated. As regards the rhythmic patter, I am somewhat in the position of Lewis Carroll's Alice, when the Red Queen asked her, "What is the French for fiddle-de-dee?" *Pu! Pa! Piopio! O fa! O fi!* are all expressions which we can only understand in the spirit of fiddle-de-dee, and cannot translate at all. And so hazy is the native memory regarding the ancient legends and tales whose events and characters are referred to in a fragmentary way in these sing-song jingles, that few of them could be explained. However, it appears worth while to give the *ha'anaunau* and *patautau* with the figures to which they belong, offering the scraps of translation which I could obtain.

## STRING FIGURES FROM THE MARQUESAS

## STATIONARY FIGURES

## TUKII KEA

1. Place the loop on each hand, so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and

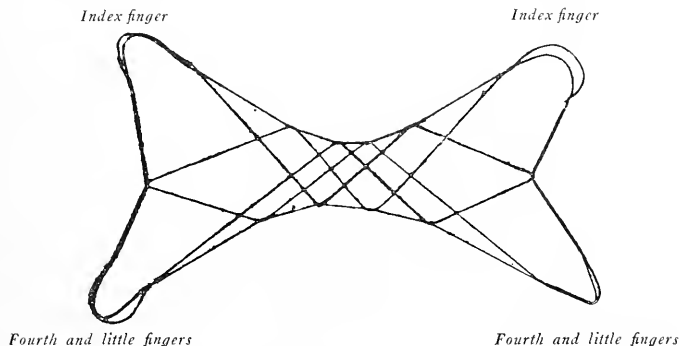


FIGURE 1.—String figure, *tukii kea* (stone pounder), found on Hivaoa.

fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand. (See Pl. I, *A*.)

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position. (See Pl. I, *B*.)

3. Carry the thumbs under the intervening strings and thrust them up from the proximal side into the little finger loops: slip out the little fingers; rotate the thumbs in the ulnar direction downward, away from the body, and up, carrying the little finger loops with them.

4. Thrust the thumbs from the proximal side up into the index finger loops and pick up the radial index finger strings on the dorsal sides of the thumbs, and draw strings out.

5. With the thumb and the index finger of the opposite hand, pick up the double proximal thumb loops, lift them over the end of the thumb

and drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.

6. Thrust the little, fourth, and middle fingers from the proximal side up into the loops with the index fingers and catch the double center strings with them.

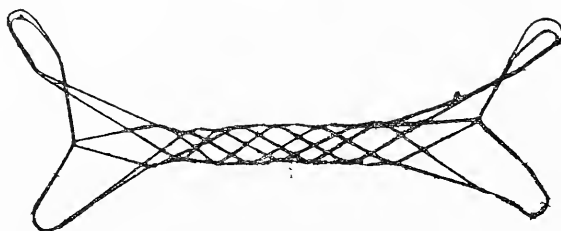
7. Withdraw the thumbs, and extend the figure, palms out. (See fig. 1.)

#### NA UA I TE POPI

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth

*Index finger*

*Index finger*



*Fourth and little fingers*

*Fourth and little fingers*

FIGURE 2.—String figure, *na ua i te popi* (two *popi*, fish), found on Hivaoa and Uahuka.

fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index-finger loop, and return to position.

3. Remove the little finger loops with the opposite hands, give them a half twist in the ulnar direction and replace them on the little fingers.

4. Twist the index finger loops in the same manner.

5. Twist the thumb loops in the same manner.

6. Thrust the index fingers from the proximal direction up into the thumb loops and take them off onto the ends of the index fingers.

7. Press the thumbs down on the radial proximal index finger strings, thrust them from the proximal side up into the little finger loops, and pick

up the radial little finger strings on the dorsal side of the thumbs, returning then to position.

8. Pick up onto the ends of the thumbs the distal radial index finger strings and draw them out.

9. With the opposite hand lift the proximal thumb string over the end of the thumb, withdraw the index finger from its distal loop while still holding the thumb loop, then drop the thumb loop over the index finger. Repeat for the other hand.

10. Thrust the thumbs from the proximal direction under the distal radial index finger strings and draw them out on the dorsal sides of the thumbs.

11. Repeat No. 9.

12. Withdraw the little fingers.

13. Thrust the thumbs from the proximal side up into the distal index finger loops, and take them off onto the thumbs.

14. Grasping and holding down the index finger strings with the middle, fourth, and little fingers, with the opposite hand give the double thumb loops a half-twist in the ulnar direction. Repeat for the other hand.

15. Thrust the thumbs from the proximal side up into the index finger loops, and, picking up the radial index finger strings on their dorsal sides, draw them out.

16. With the thumb and index finger of the opposite hand, pick up the double thumb loops, lift them over the end of the thumb and drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.

17. Thrust the middle, fourth, and little fingers up into the loops with the index fingers, catch the double center strings with the fourth and little fingers, hold them, withdraw the thumbs, and extend the figure, palms out. (See fig. 2.)

A player on Uahuka performs Nos. 3, 4 and 5 without the help of the opposite hand, twisting the loops by full rotations of each finger.

#### TAPA'AU TUA FITU

1. Place the loop on each hand, so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up

the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop and return to position.

3. With a rotary movement in the ulnar direction pass the thumbs under all the intervening strings and up through the little finger loops, picking up on their dorsal sides on the return rotation the ulnar little finger strings.

4. Drop the little finger strings.

5. Thrust the thumbs into the index finger loops from the proximal side and pick up on their dorsal sides the radial index finger strings.

6. With the thumb and the index finger of the opposite hand, pick up the double proximal thumb strings, lift them over the end of the thumb and

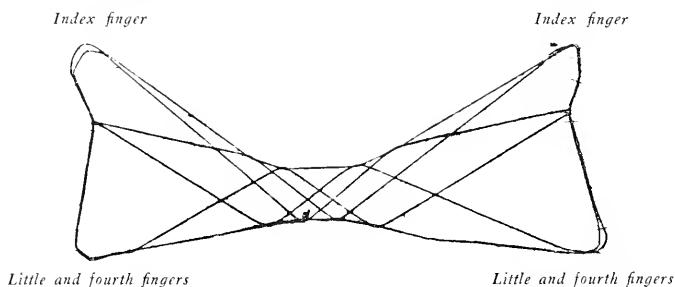


FIGURE 3.—String figure, *tapu'au tua fitu* (translation not known), found on Hiva-oa.

drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.

7. Thrust the middle, fourth, and little fingers up into the index finger loops and catch the double center strings with them.

8. Withdraw the thumbs, and extend the figure with palms out. (See fig. 3.)

#### PIRI KOOKA

The figure is made with a double string.

1. Slip the loop over the left thumb and index finger and over the right thumb, so that the double string passes along the radial and dorsal sides of the left thumb, along the dorsal side of the left index, between the index and middle fingers to the palmar side of the hand and across to the right hand, where it passes between the thumb and index to the dorsal side



of the hand, lies along the dorsal and radial sides of the right thumb and so returns again to the left hand.

2. With the right index finger, from the distal side pick up on its palmar side the dorsal left hand string, twisting it a half-turn in the counter-clockwise direction and carrying it back on the right index to position.

3. Thrust the middle, fourth, and little fingers up through the index finger loops and with these fingers hold down against the palms the radial index finger strings and the ulnar thumb strings.

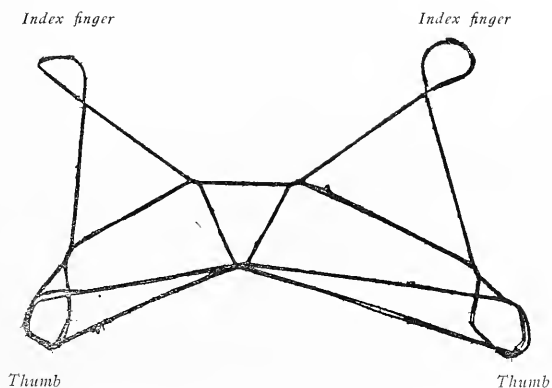


FIGURE 4.—String figure, *piri kooka* (attachment of a breadfruit net), found on Fatuhiva.

4. Rotate the index fingers in the radial direction, so as to descend from a distal direction upon the radial thumb strings and pick them up on the palmar side of the index fingers. Continue the rotation, carrying the thumb strings through the index finger loops, which fall off the index fingers, leaving these in possession of the thumb loops.

5. Withdraw the thumbs.

6. Thrust the thumbs under the radial fourth finger strings, and pull towards the body.

7. Rotate in the ulnar direction the index fingers, so as to descend from the distal direction upon the ulnar little finger strings, which cross straight from hand to hand and form the bottom of the figure, and pick these up on the palmar sides of the index fingers. Continue the rotation, carrying these little finger strings up through the index finger loops.

8. Withdraw the thumbs.

9. From the other side of the figure, that is, towards the body, thrust the thumbs into the loops held by the fourth and little fingers, transfer these loops to the thumbs, and draw out the fourth and little fingers. Give the thumb loops a half-twist in the counter-clockwise direction, and extend the figure with palms out. (See fig. 4.)

#### UAHUKA

1. Take the hold on the thumb and index finger of each hand, so that the string runs along the radial side of the thumb, across the dorsal sides

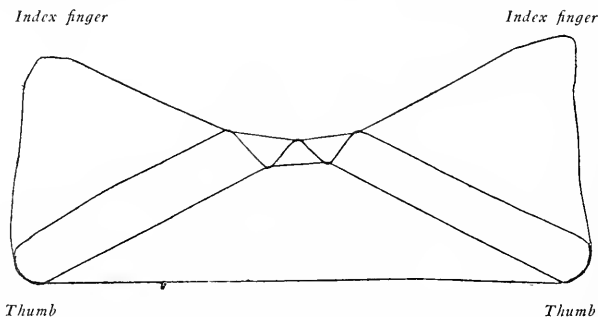


FIGURE 5.—String figure, Uahuka (an island in the Marquesas), found on Nukahiva.

of the thumb and index finger, between the index and middle fingers, and across to the opposite similar hold.

2. With the right index finger pick up on its dorsal side, from the proximal direction, the dorsal left-hand string and draw it between the left thumb and index finger back to position.

3. Withdrawing the right thumb, thrust it up through the proximal index finger loop of the right hand and pick up on its dorsal side the distal ulnar index finger string, drawing it down under the proximal radial index finger string, and so back to position.

4. Carrying the left thumb under the index finger loop of the left hand, pick up on its dorsal side the ulnar index finger string and carry it back under the radial index finger string to position.

5. Rotate the right index finger in an ulnar direction, so as to pick up on its palmar side the proximal ulnar index finger string, the distal index

finger loop falling off as the finger continues the full rotation back to position.

6. Rotate the left index finger in an ulnar direction (full rotation) up through the proximal thumb loop and pick up on its dorsal side the proximal ulnar thumb string, the former loop falling off the index finger.

7. Free the left thumb of the index finger loop by slipping it out from under the radial index finger string. There is now one loop on each thumb and index finger respectively.

8. Carry both thumbs under the index finger loops and pick up on their dorsal sides the ulnar index finger strings, drawing these back under the radial index finger strings to position.

9. Rotate both index fingers in the ulnar direction so as to come up through the thumb loops and pick up on their dorsal sides the proximal ulnar thumb strings, the old index finger loops falling off.

10. Extend the figure, palms out, by rotating the thumbs in the radial direction. (See fig. 5.)

## TITIMA

1. Place the loop on each hand, so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth

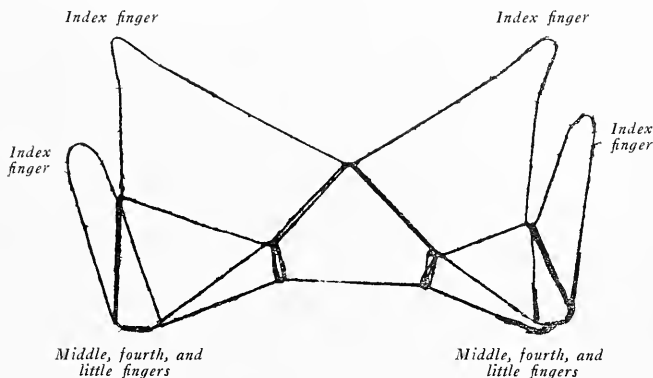


FIGURE 6.—String figure, *titima* (translation not known), figure found on Hivaoa.

fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index-finger loop, and return to position.

3. Shift the index finger loops to the fourth fingers, the thumb loops to the middle fingers, on both hands.

4. Rotate the right index finger in an ulnar direction down through the middle finger loop, picking up the radial middle finger string as the rotation continues back to position, thus twisting the radial middle finger string around the index finger.

5. From the proximal direction, slip the left index finger up into the right index finger loop, and draw out to position.

6. Carry the thumbs under the intermediate strings and pick up on their dorsal sides the ulnar little finger strings, carrying these back to position.

7. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial fourth finger strings, carrying them back to position.

8. Withdraw the little fingers.

9. Carry the little fingers over the intermediate strings and pick up on their dorsal sides the proximal ulnar thumb strings, carrying these back to position.

10. Withdraw the thumbs.

11. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial little finger strings, carrying these back to position.

12. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial fourth finger strings, close to the fingers, and draw them back to position.

13. Withdraw the little fingers.

14. Carry the little fingers over the intermediate strings and pick up on their dorsal sides the proximal ulnar thumb strings, carrying these back to position.

15. Withdraw the thumbs.

16. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial little finger strings, carrying these back to position.

17. With the right hand, pick up the left-hand, radial, index finger string, drop off the thumb loop, lift the radial, index finger string over the thumb, drawing it through the thumb loop in dropping it over the thumb. Repeat for the other hand.

18. Take the loops off the middle, fourth, and little fingers gently and let them hang free.

19. Take a new hold of all strings, except the radial thumb strings, by descending into the thumb loop from the distal direction with the middle, fourth, and little fingers, and pressing them against the palms.

20. Insert the index fingers towards the body into the thumb loops, taking the hold off onto them. Extend the figure.

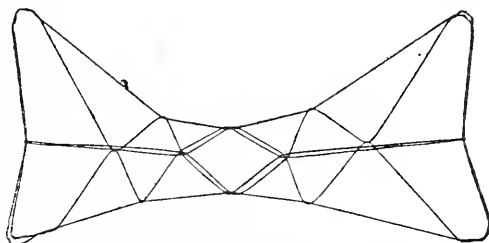
21. Change the index finger hold by inserting these fingers into the figure towards the body and towards the center of the figure, beyond the first, double, crossing strings at the top. (See fig. 6.)

#### TE MAHAIVERO

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth

*Index finger*

*Index finger*



*Fourth and little fingers*

*Fourth and little fingers*

FIGURE 7.—String figure, *te mahai zero* (translation not known), found on Uahuka.

fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop and return to position.

3. Twist the loops on all fingers once in the ulnar direction by rotating the fingers.

4. Thrust the index fingers up from the proximal side into the thumb loops and take them off onto the ends of the index fingers.

5. Carry the thumbs over the proximal, radial, index finger strings and under the proximal, ulnar, index finger strings and pick up on their dorsal sides the radial, little finger strings, carrying these back through the proximal, index finger loops to position.

6. Pick up on the ends of the thumbs the distal, radial, index finger strings, and draw back to position.

7. Holding all the left-hand strings with the middle, fourth, and little fingers, with the thumb and index finger of the left hand lift the proximal, radial string of the right thumb over the tip of the thumb, and wind it once around the thumb in the ulnar direction. Lift what is now the proximal, radial thumb string over the tip of the thumb and wind it once around the thumb in the ulnar direction.

8. Repeat on the left hand, winding the strings around the thumb in the ulnar direction.

9. Drop the distal loops off the index fingers.

10. Withdraw the little fingers.

11. Twist the thumb loops once in the radial direction.

12. Pick up the radial, index finger strings on the ends of the thumbs.

13. With the thumb and index finger of the opposite hand, pick up the double proximal, radial thumb strings, lift them over the end of the thumb and drop them over the index finger; pick up the proximal, ulnar index finger string, lift it over the tip of the index finger, and drop it over the thumb. Repeat for the other hand.

14. Catch the double center strings, resulting from this move, with the fourth and little fingers, hold them, withdraw the thumbs, and extend the figure, palms out. (See fig. 7.)

#### TOAKE

1. Place the loop on each hand, so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Holding all the strings against the palms with the fingers, with the opposite hand pull out each index finger loop on the dorsal side of the hand; slip the right index finger loop through the left index finger loop and onto the left index finger. Take up the former left index finger loop onto

the right index finger, thus exchanging index finger loops, the one through the other, each time entering the loop from the distal side.

4. Withdraw the thumbs.

5. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial, little finger strings.

6. Carry the middle fingers over the ulnar, index finger strings and

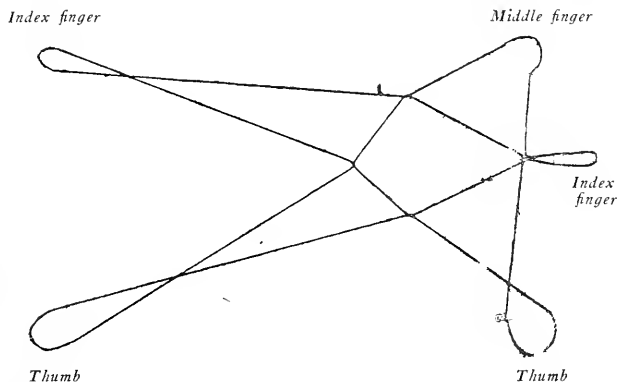


FIGURE 8.—String figure, *toake* (the long-tailed phaeton), found on Uapou.

pick up on their dorsal sides the radial, index finger strings at points towards the center of the figure beyond the crossing palmar strings.

7. With the mouth, draw the ulnar, little finger strings through the figure, over the radial thumb strings. Drop these latter off the thumbs and take up the ulnar, little finger strings.

8. Withdraw the little fingers.

9. Twist the thumbs towards the body, turn the palms out with the hold on the thumbs and between the index and middle fingers.

10. Lay the figure on the lap, and, retaining the right hand hold, withdraw the left hand and transfer the left thumb to the same twist-hold on the lower, crossing string, toward the center, beyond the left-hand triangle, by entering the figure with the thumb from the outside and rotating it towards the body in the radial direction, around the lower crossing string.

11. Transfer the left index finger to the same hold on the upper crossing string, beyond the left-hand triangle towards the center of the figure, by dropping the left index finger hold and thrusting that finger into the

figure from the outside, towards the body. Turn the palms out. (See fig. 8.)

PUA'A VAEVAE VAU

1. Lay the loop across the lap. Lift the string nearest the body (1) and lay it across the other string (2) at right angles. Pick up 2 string on both sides of 1, so as to form a loop (A) around it, and hold in the right hand. Pick up 1 on both sides of loop A, so as to form loop (B) inter-

Index finger

Middle finger



Little finger

Little finger

FIGURE 9.—String figure, *pua'a vaevae vau* (pig with eight legs), found on Hivaoa, Uahuka, and Uapou; called on Uahuka, *pua'a ha'apito* (translation not known); on Uapou, *amahu* (translation not known).

locking it. Hold in the left hand. Extend full length the entire double loop with its interlocking loops.

2. Place the loops A and B on the palm of the left hand where they intersect. Draw the strings of loop A between the middle and fourth fingers to the dorsal side of the hand. Carry the strings of loop B around to the dorsal side of the hand, the one around the ulnar side of the little finger, the other around the radial side of the index finger. There are now two long loops on the dorsal side of the left hand, composed of a string (a) on the ulnar side of the little finger, two strings (b and c) between the middle and fourth fingers, and a string (d) along the radial side of the index finger.

3. Make a loop in the b string in the counter-clockwise direction, crossing over itself (not under), and thrust the index finger up through it from the proximal side, so that the string passes across the palmar side of the index finger, around the radial and dorsal sides of the index finger, and under itself (the b string), as it returns to the center of the dorsal side of the hand.

4. Pull the d string up through this index finger loop until the entire loop of d and c strings is pulled through. Tighten the index finger loop by pulling the b string.

5. Make a similar loop in the c string, and place it over the little finger, so that the string passes in an ulnar direction across the dorsal side



of the little finger, around the ulnar side and the palmar side, between the little and fourth fingers and under itself (the c string). Pull the a string up through this little finger loop, until the entire loop composed of a and b strings is drawn through. Tighten the little finger loop by pulling the c string.

6. Repeat on the index finger and on the little finger alternately until there are only short loops of a, b, c, and d strings left. With the palm of right hand up, thrust the little and middle fingers up into these two short loops and hold them.

7. Slip all the loops off the left hand, except the palmar string at the base of the little and fourth fingers, through the central loop, and at the base of the third and index fingers. Take the left-hand hold, palm up, in these two loops with the index and little fingers. Slip the freed loops along the figure at even distances and extend the figure. (See fig. 9.)

## PROGRESSING FIGURES

### KERU'U

(The double string plays no part in the figure except to form a heavier loop, and will be referred to as a single string.)

1. Make a double loop and slip it over the left thumb and index finger and over the right thumb, so that the double string passes along the radial side of the left hand, back of the thumb and the index finger, between the index and the middle fingers, across to the right hand, between the index finger and the thumb, back of the thumb and along the radial side of the hand.

2. With the right index finger from the distal direction pick up on the palmar side of the index finger the dorsal left hand string, twisting it in the clockwise direction on the return, so that the loop lies along the dorsal side of the right index finger.

3. Holding down the ulnar index finger string of the right hand with the fourth and the little fingers, with the right thumb from the proximal direction, pick up the ulnar index finger string close to the finger and draw it through the thumb loop, so that the old loop slips from the thumb and the new one lies around its dorsal side.

4. Still holding with the fourth and the little fingers, slip the index finger of the right hand out of its loop and insert it into the thumb loop from the proximal direction, taking this off onto its end.

5. Remove the fourth and little finger loop onto the thumb of the right hand, entering it from the proximal direction.

6. With the aid of the other fingers, slip the left index finger out of its loop, twist the loop one-half a rotation in the ulnar direction, and return it to the index finger. Repeat this with the left thumb loop.

7. Resting the dorsal side of the right little finger on the lower central

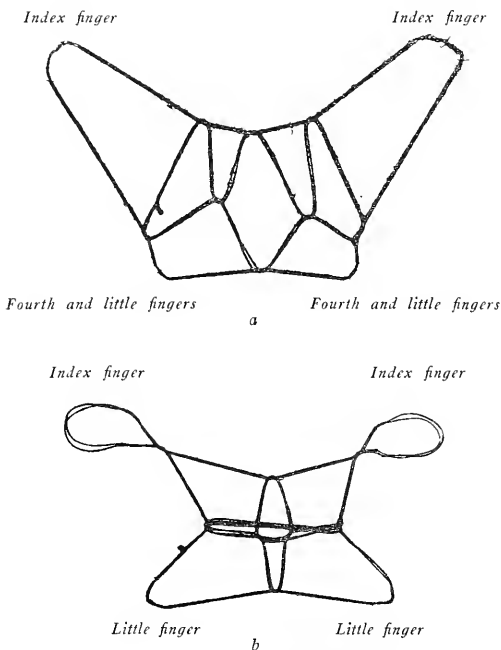


FIGURE 10.—Progressive string figure: *a*, *keru'u* (paddling a canoe), found on Hivaoo, Uahuka, and Uapou; *b*, *te vaka* (the canoe), a progression from *a*, called on Uahuka, *te vaka no Hai* (the canoe of Hai), on Uapou called *te hiepe tia ana* (the sailing ship).

cross-string, pick up on its palmar side the upper central cross-string and rotate it towards the body, carrying it over the lower string.

8. Hold down the left ulnar thumb string with the palmar side of the left little finger.

9. Rotate both index fingers towards the body and over the radial thumb strings. Continue the rotation away from the body now, picking up

the radial thumb strings on the dorsal sides of the index fingers, pulling them through the loops just dropped from the index fingers.

10. Withdraw the thumb.

11. Insert the thumbs into the figure over the upper corner crossing strings, and, drawing them towards the body, pick them up on the palmar side of the thumbs and carry them over the lower corner crossing strings. Rotate now in the radial direction, so as to pick up these latter strings on the dorsal sides of the thumbs, and carry them to position.

12. Move the index fingers towards the body and insert them into the thumb loops, so that the former index finger loops drop off and the index fingers pick up the thumb loops.

13. Withdraw the thumbs.

14. Insert the thumbs under the lower crossing string and pull it towards the body, the string lying around the dorsal sides of the thumbs.

15. Remove the fourth and little fingers and insert them into the thumb loops.

16. Withdraw the thumbs and extend the figure. (See fig. 10, *a*.)

Continue for:

#### TE VAKA

17. Insert the thumbs under the inner legs of the small side triangles and pull them towards the body.

18. Move the thumbs to meet each other, passing both under both thumb loops, one from either side. Slip the right thumb out of its loop and pick up the left thumb loop on it, drawing it back over the other thumb loop, so that the thumbs have exchanged loops the one through the other.

19. With the index fingers from the proximal direction pick up the ulnar thumb strings.

20. Holding the right hand strings in the middle, fourth, and little fingers, with the right index finger and thumb pick up the left proximal index finger loop through the thumb and index finger loop, and lift it off the index finger. Slip the index finger from under its ulnar distal string, twist the removed loop once in the ulnar direction and replace it on the index finger. Repeat for the right hand.

21. Withdraw the thumbs and extend the figure on the index and little fingers. (See fig. 10, *b*.)

#### HOPE ONI

1. Place the string on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around

the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. With the index fingers from the distal side come over the ulnar little finger strings, and, while the little fingers still hold their loops, carry

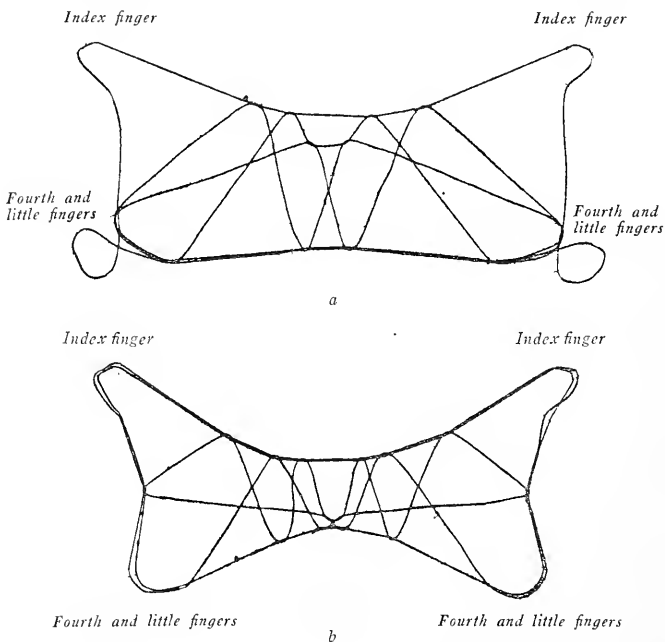
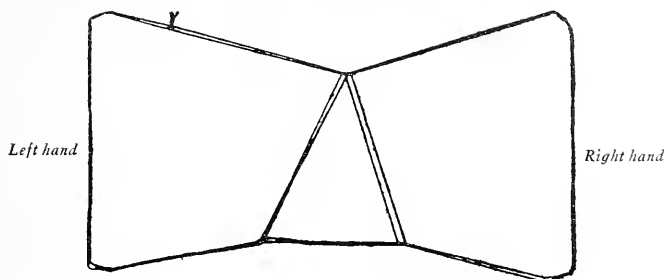


FIGURE 11.—Progressive string figure: *a*, *hope oni*, found on Hivaoa, Fatuhiva, Uahuka, and Uapou; called on Uahuka, *kape honi* (soldier kiss); on Uapou, *ta haka ta ea* (meaning not known); *b*, *te a'anui manamana o Tafai* (the many routes of Tafai, a legendary hero who came to the branching of a road and did not know which route to follow), a progression from *a*, found on Hivaoa, Uahuka, Uapou, and Fatuhiva; called on Uahuka, *tahi mana* (one branch); on Uapou, *tapau kua* or *tapau mi'o*, also called *tapau mi'o* on Fatuhiva (translations unknown); *c*, *O Pua* (the name of a legendary woman), a progression from *b*, found on Hivaoa, Uahuka, Uapou, and Fatuhiva; called on Fatuhiva, *Pua fitu* (Pua climbs).



c  
FIGURE II.—Continued.

back on the index fingers in the ulnar rotation all the strings with the exception of those on the thumbs.

4. With the opposite, radial, rotary movement, that is, towards the body this time, carry the index fingers from the distal side down through the thumb loops, and continue the full rotation to position.

5. Withdraw the thumbs.

6. With the middle fingers press down the double ulnar index finger strings, insert the thumbs over these and over the radial little finger strings and hold them down, so that the index fingers can pick up, on their palmar sides, the ulnar little finger strings.

7. Insert the fourth and little fingers where the thumbs are and hold while the rotation of the index fingers is continued back to position.

8. Extend with the palms in, holding the figure on the index fingers and on the fourth and little fingers together. (See fig. II, a.)

Continue for:

#### TE AANUI MANAMANA O TAEAI

9. Insert the thumbs above the ulnar little finger strings which cross the figure obliquely from the lower corners, and, with the dorsal sides of the thumbs, draw them down over the double strings forming the bottom of the figure and pick up these double strings on the dorsal sides of the thumbs.

10. Gently drop all loops except those on the thumbs and index fingers.

11. Extend the figure slightly, pick up the loose, hanging loops on the dorsal sides of the little fingers.

12. Withdraw the index fingers, so that their loops remain upon the thumbs.

13. Thrust the index fingers from the proximal side up into the little finger loops and remove them onto the index fingers.

14. With the thumbs pick up from the proximal side the radial index finger strings.

15. With the thumb and the index finger of the opposite hand, pick up the double proximal thumb loops, lift them over the end of the thumb and drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.

16. Thrust the fourth and little fingers up into the loops with the index fingers and catch the double center strings with them.

17. Withdraw the thumbs and extend the figure with palms out. (See fig. 11, *b*.)

Continue for:

#### O PUA

18. Withdraw the fourth and little fingers from the figure, and insert them from the proximal side into the double loop with the index fingers. Extend the figure, palms up.

19. Lay the figure on the lap. It will be seen that the strings nearest the hands, which cross the top and bottom double strings cross over both. Draw the double loop on the right side from under this crossing string and drop it out of the figure by tightening. Repeat on the left side, and continue to remove the strings crossing over both top and bottom of the figure in the same manner until only a triangle of double sides is left in the center. (See fig. 11, *c*.) Slide this back and forth in time to the following chanted words:

E Puapua,  
Puahoi  
Pua to fitifiti  
Ite kakena,  
E Puapua-e,  
Puahoi.

Puapua (a legendary woman),  
Puahoi (her brother),  
Pua, climbing, climbing,  
Mountainous slopes,  
Puapua,  
Puahoi.

#### VARIATIONS

On Uapou, the figure is varied as follows: At the end of Move No. 6 the figure is moved by turning the hands alternately, palms up and palms down, to the time of these words:

Pepehi-e, pepehi  
Ena tetai  
Iuna-e

To hope, to hope  
Perere to hope.

When No. 9 has been formed and the figure extended, which is called *tahaka ta ca*, the center strings are pulled with the words "*Ta, ta, ta haka*

*ta ea.*" Sometimes, after No. 11, the fourth and little fingers are inserted into the loops held by the thumbs, dropping out these latter, and the figure extended with palms out, "*taheke a kua.*"

## KOUKAPE

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Drop the loops from the thumbs.

4. With the palmar side of the right index finger pick up the ulnar right little finger string, and, continuing the clockwise rotation, return with it to position, so that the string runs from the ulnar side of the little finger, across the palmar side of the four fingers, around the radial, dorsal, and ulnar sides of the index finger, and across to the ulnar side of the opposite hand.

5. Pick up this distal radial string of the right index finger on the dorsal side of the left index, entering the index finger loop from the proximal direction; draw the hands apart to position.

6. Pass the thumbs under the index finger loops and through the little finger loops from the proximal direction; pick up the radial little finger strings on the dorsal sides of the thumbs and draw them back across the palms to position.

7. Pick up the distal radial index finger strings on the dorsal sides of the thumbs and pull them out to position.

8. With the mouth (or more dextrously with the fingers) lift the proximal thumb loops over the distal thumb loops and over the tips of the thumbs, and drop them.

9. Withdraw the index fingers from their distal loops.

10. Thrust the index fingers into the thumb loops from the proximal direction and take them off the thumbs onto the index fingers.

11. Repeat No. 6.

12. Repeat No. 7.

13. Repeat No. 8.

14. Bend the middle fingers over the ulnar index finger strings and thrust them under the proximal radial index finger strings, picking these

up on the dorsal sides of the middle fingers and carrying them back to position.

15. Withdraw the little fingers from the figure.

16. Extend the figure by turning the palms outward. (See fig. 12, *a*.)

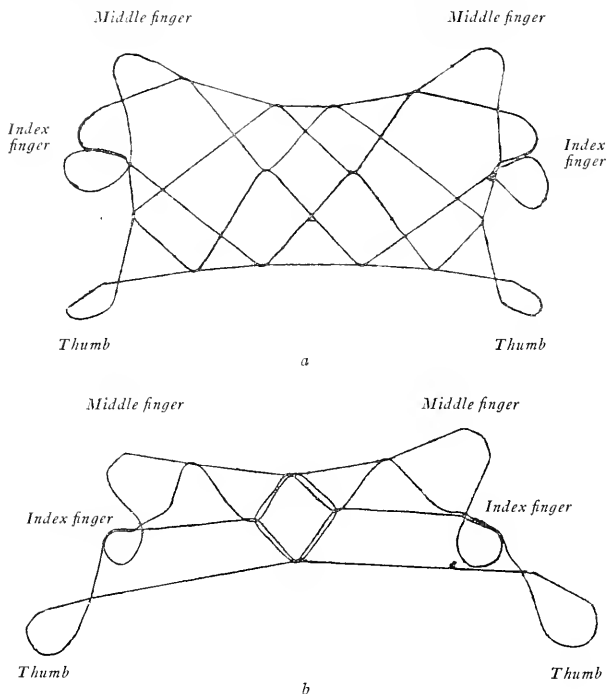


FIGURE 12.—Progressive figure: *a*, *kaukape* (a membrane between the intestines), found on Hivaoa; *b*, *ipu ava Akaui* (the kava bowl of Akaui, an old hero), progression from *a*, found on Hivaoa; *c*, *ipu ava Akaui*, progression from *b*, found on Hivaoa; *d*, *ipu ava Akaui*, progression from *c*, found on Hivaoa.

Continue the above for the three figures of:

#### IPU AVA AKAUI

17. Turn the above figure back with palms facing each other.

18. Drop the thumb loops.



19. Insert the thumbs from the proximal side and pick up the distal radial index finger strings.

20. Turn the palms out, extend the figure. (See fig. 12, *b*.)

21. Lay this figure on the lap, removing the hands gently.

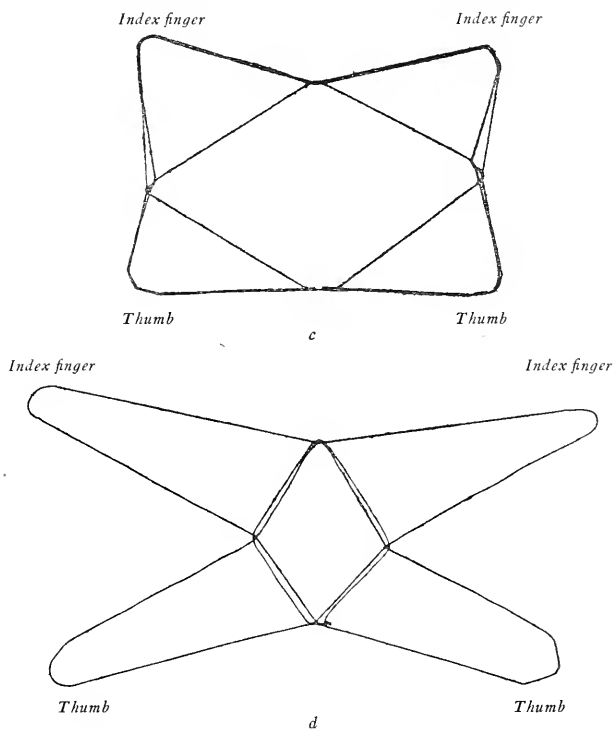


FIGURE 12.—Continued

22. Thrust the thumbs and index fingers into the figure at the lateral points of the central diamond, so that the strings passing to right and left from these points lie between these digits; pass them under the diamond sides and up into the diamond. Extend the figure on the thumbs and index fingers. (See fig. 12, *e*.)

23. Lay this figure on the lap, remove the hands gently.

24. Thrust the thumbs and index fingers into the figure on different sides of the right and left diamond points, pass them under the diamond sides and come up into the center. Extend the figure. (See fig. 12, d.)

TE NOHONA O TE KUA

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers,

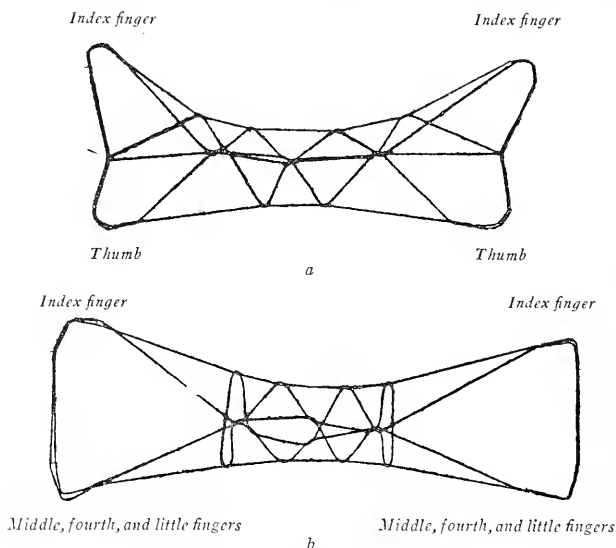


FIGURE 13.—Progressive figure: *a*, *te nohona o te kua* (the perch of the kua bird), found on Hivaoa and Uapou; *b*, *kokirari te komao* (sings the komao bird), progression from *a*, found on Hivaoa and Uapou, called on Uapou, *na kumu hei* (a small wreath of fragrant plants).

across the palm, between the index finger and thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger from the proximal direction pick up the left palmar string and return. With the left index finger from the proximal direction pick up the right palmar string inside the right index finger loop and return.

3. Carry the thumbs over all intermediate strings, and from the proximal side pick up the radial little finger strings.

4. Carry the middle fingers over the intermediate strings, and, from the proximal side, pick up the proximal ulnar thumb strings.
5. Withdraw the little fingers.
6. Carry the little fingers over the intermediate strings, and from the proximal side pick up the proximal ulnar thumb strings.
7. Withdraw the thumbs.
8. Carry the thumbs under the intermediate strings, from the proximal side pick up the radial little finger strings and draw them back under all the strings to position.
9. Withdraw the little fingers.
10. Remove the middle finger loops onto the thumbs.
11. Insert the thumbs from the proximal side into the index finger loops, pick up the radial index finger strings on their dorsal sides, and draw them out.
12. With the thumb and the index finger of the opposite hand, pick up the proximal double thumb loops, lift them over the end of the thumb and drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.
13. Thrust the middle, fourth, and little fingers up from the proximal side into the index finger loops and catch the double center strings, hold them, withdraw the thumbs, and extend the figure with palms out. (See fig. 13, *a*.)

Continue for:

#### KOKIRARI TE KOMAO

14. Withdraw the middle, fourth and little fingers and thrust them into the loop with the index fingers. Extend the figure. (See fig. 13, *b*.)

#### SLIDING FIGURES

##### KOHA TUA

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and ring fingers, across the palm, between the index finger and the thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.
2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Rotating the index fingers in the ulnar direction, descend over the radial little finger strings from the distal direction into the little finger loops, picking up both radial little finger and ulnar index finger strings on

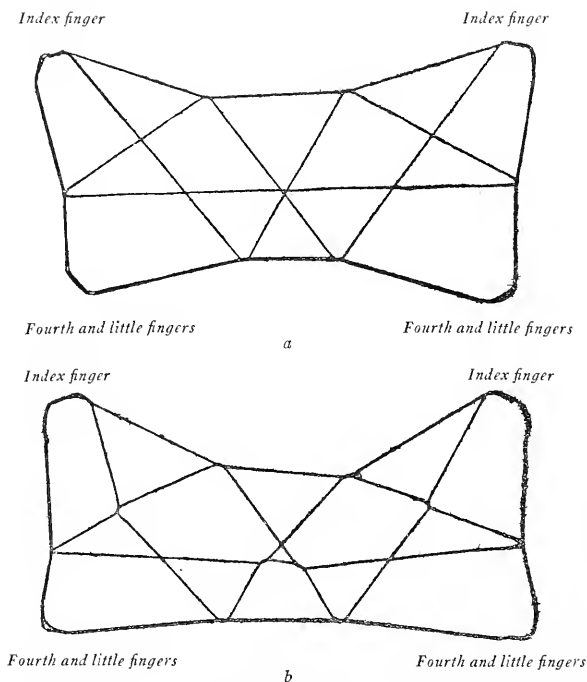


FIGURE 14.—Progressive figure: *a*, *koha tua* (the horizontal bamboo supporting the back rafters of a house), found on Hivaoa; *b*, *na humu* (the small humu fish associated with Tanaoa in legend), progression from *a*, found on Hivaoa.

the palmar sides of the index fingers, carrying them back to position by continuing the rotation, ending with both loops twisted around the index fingers.

4. Withdraw the little fingers.

5. Holding down the ulnar index finger strings with the fourth and little fingers, with the teeth draw them through the thumb loops, under the ulnar thumb strings and over the radial thumb strings. Withdraw the

fourth and little fingers and bring these under all the strings to pick up the same loops on the radial sides of the hands.

6. Withdraw the thumbs. (See fig. 14-a.)

Continue for:

#### NA HUMU

7. Thrust the thumbs under the proximal radial index finger strings which cross to the bottom of the figure, and, towards the center of the figure inside the point where they are crossed by the upper corner crossing strings pull them towards the body.

8. Withdraw the fourth and little fingers.

9. Repeat No. 5.

10. Withdraw the thumbs. (See fig. 14-b.) Pull the central crossing strings with the thumbs, to the time of the following:

Na humu-e tito tito<sup>10</sup>  
Na humu oe a Tanaoa  
Tito tito

Humu, nibble, nibble  
Humu, you are Tanaoa's  
Nibble, nibble.

#### TATAIAHUE

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers, across the palm, between the index finger and thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger from the proximal direction pick up the left palmar string and return. With the left index finger from the proximal direction pick up the right palmar string inside the right index finger loop and return.

3. Remove the index finger loops to the middle fingers.

4. Remove the thumb loops to the index fingers.

5. With a rotary movement of the right thumb in the ulnar direction, thrust it down into the index finger loop from the distal side and pick up on the dorsal side of thumb the radial string of the index finger; and, continuing the rotation, return so that the loop is twisted around the thumb and back of the index finger.

6. With the thumb and index finger of the left hand, draw out this loop of the right thumb, insert the left thumb into it from the proximal side, and draw it out, picking up this loop.

7. With the right thumb and index finger remove the loop on the left little finger and drop it over the index and middle fingers of the left hand. Repeat on the right hand.

<sup>10</sup> *Tito tito* (onomatopoeic representation of the sound these fish make in nibbling the rocks on the shore), according to legends, is the answer the fish always make to their master, Tanaoa.

8. Holding the right hand strings between the fingers and the palm, remove the right thumb loop with the left thumb and index finger and drop it over the right index middle fingers. Repeat on the left hand.

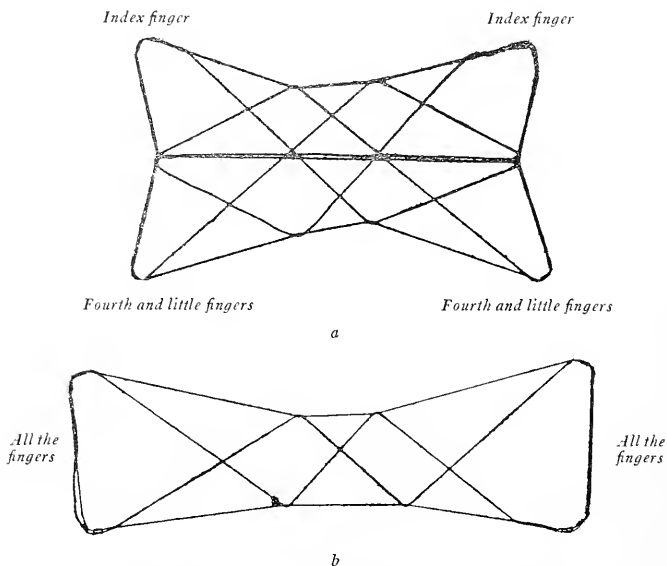


FIGURE 15.—Progressive figure: *a*, *tataiahue* (a kind of fragrant plant), found on Hivaoa; *b*, *na tama aina* (native sons), progression from *a*, found on Hivaoa.

9. With the right thumb and index finger, lift the lowest radial string on the left index finger over the end of this finger and drop it between the index and middle fingers of the left hand. Repeat on the right hand.

10. With the right thumb and index finger, lift the lowest ulnar string on the left middle finger over the end of this finger and drop it between the left index and middle fingers. Repeat on the right hand.

11. Carry the fourth fingers over the double ulnar strings on the middle fingers and hold them down.

12. Hold the double loops on the right index finger in the teeth, slip the index and middle fingers out of the figure, return the index finger in a direction from the body out, into the loop held by the teeth. Release the hold with the teeth. Repeat for the left hand. (See fig. 15-a.)

13. Take in the teeth the free double string passing across the back of the figure towards the body and pull it back and forth, in time to the following words chanted:

Tataiahue,  
Te uu o Feani.  
Toi atu,  
Toi mai,  
A titii,  
Pu!

Tataiahue (a fragrant herb),  
The native growth of Feani (a mountain).  
Pulled out [away],  
Pulled in [towards one],  
Throw it away.  
Never mind! (It's of no consequence!)

Continue for:

NA TAMA AINA

14. Remove the fourth and little fingers, thrust all the fingers into the index finger loops in the direction towards the body, and extend the figure. (See fig. 15, *b*.)

HOPE PUAU

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers,

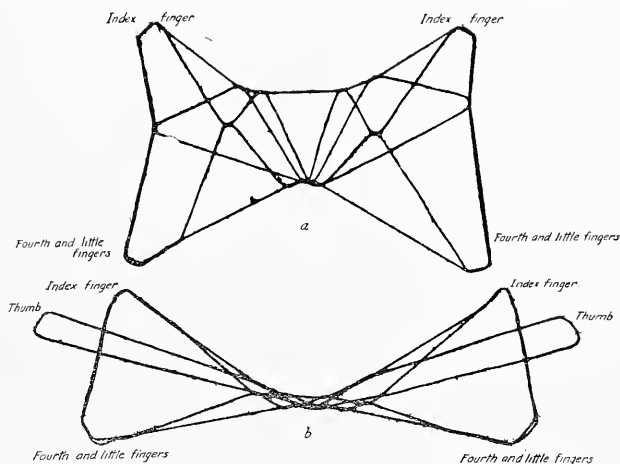


FIGURE 16.—Sliding figure: *hope puau* (translation not known) found on Hivaoa: *a*, figure open; *b*, closed by pulling of thumb loops.

across the palm, between the index finger and the thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Withdraw the thumbs.

4. Carry the right thumb over the radial index finger string, continue its rotation in an ulnar direction until it is in position again, thus twisting the radial index finger string around it.

5. From the proximal direction insert the left thumb into the loop on the right thumb and pull it back.

6. Carry the thumbs over the intermediate strings and pick up on their dorsal sides the radial little finger strings, returning to position.

7. Carry the middle fingers over the intermediate strings and pick up on their dorsal sides the ulnar thumb strings, returning to position.

8. Withdraw the little fingers.

9. Carry the little fingers over the intermediate strings and pick up on their dorsal sides the proximal ulnar thumb strings.

10. Withdraw the thumbs.

11. Carry the thumbs over the index finger strings and under the middle finger strings, pick up on their dorsal sides the radial little finger strings, and return to position.

12. Withdraw the little fingers.

13. Take the middle finger loops off onto the thumbs.

14. From the proximal direction pick up the radial index finger strings onto the ends of the thumbs.

15. With the thumb and index finger of the opposite hand, pick up the proximal double thumb loops, lift them over the end of the thumb and drop them over the index finger; pick up the proximal ulnar index finger string, lift it over the tip of the index finger and drop it over the thumb. Repeat for the other hand.

16. Catch the double center strings, resulting from this move, with the fourth and little fingers, hold them, withdraw the thumbs, and extend the figure, palms out. (See fig. 16.)

Pull the strings crossing obliquely from the ulnar index finger back and forth to the following chant:

Io ani  
Una una i te tai

To hope, to hope,  
Perere to hope.



## ANATIFAIA

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers, across the palm, between the index finger and thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger,

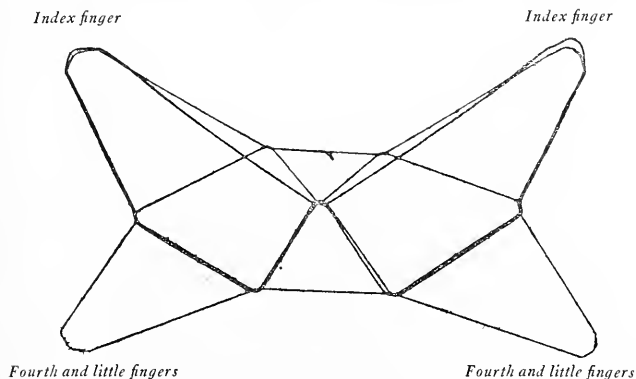


FIGURE 17<sub>A</sub>—Sliding figure, *anatifaia* (back part of the house), found on Fatuhiva.

from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Rotate the index fingers in the ulnar direction over the radial little finger strings, down through the little finger loops; continue the rotation down, under and up to position, taking the little finger loops off onto the index fingers, with a twist in both little finger and index finger loops.

4. With the fourth and little fingers hold down the ulnar index finger strings.

5. Pass the thumbs under the radial index finger strings and under the ulnar index finger strings, where they are held against the palm by the fourth and little fingers. Pick up the ulnar index finger strings on the dorsal sides of the thumbs and pull them through the thumb loops. The old thumb loops fall off.

6. Withdraw the index fingers, leaving the figure on the thumbs, fourth and little fingers.

7. Change the hold on the thumbs to the index fingers.

8. Insert the thumbs into the figure below the central crossing string, pick this up on the dorsal sides of the thumbs and pull it towards the body.

9. Withdraw the fourth and little fingers and insert them into the loops held by the thumbs, withdrawing the thumbs. Extend the figure (fig. 17) and press up and down with the thumbs the double strings crossing the lower corners, to the time of the following words:

E ana e tifaia!  
E ana e tifaia!

EO

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers,

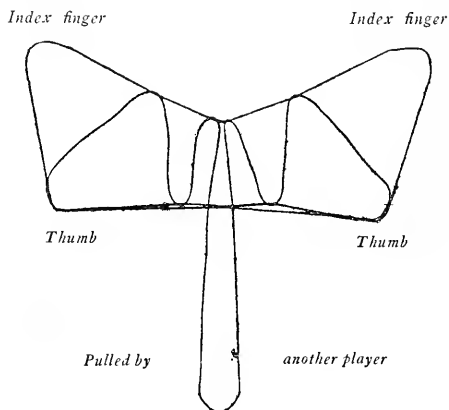


FIGURE 18.—Sliding figure, *eo* (decayed), found on Hivaoa.

across the palm, between the index finger and thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Carry the thumbs under the index finger loops and pick up on their dorsal sides the ulnar index finger strings and carry them back under to position.

4. Carry the index fingers down under their radial strings, under the proximal ulnar thumb strings and up through the thumb loops, picking up the ulnar thumb strings, so that the old index finger loops drop off, and the original thumb loops replace them.

5. Withdraw the thumbs in a proximal direction from the new index finger loops and return to position from under them, the thumbs carrying with them the original index finger loops which have been transferred to them with a half twist in the ulnar direction.

6. Repeat Nos. 3, 4, 5.

7. Repeat Nos. 3 and 4. Continue No. 4 by retaining both loops on the thumbs and extending the figure between the thumbs and index fingers, the little fingers being withdrawn. (See fig. 18.)

8. A second player pulls the loose string dropped by the little fingers, opening and closing the figure to the following words:

E eo e  
Kaki mei  
Kaki mei te eo  
Ta, ikoiko.

Decayed  
Breadfruit stem  
Breadfruit stem, the decayed  
Burrow in, insects.

# UI'A

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers,

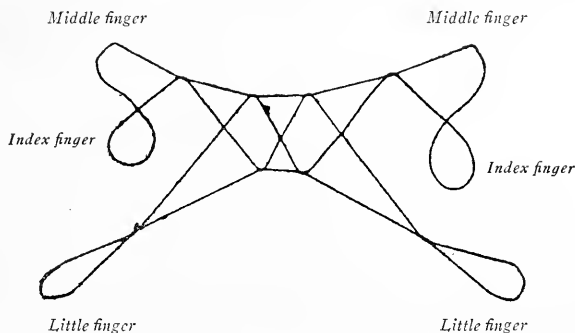


FIGURE 19.—Sliding figure, *ui'a* (lightning), found on Hivaoa.

across the palm, between the index finger and thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal side, pick up the left palmar string and return. With the left index finger, from the proximal

side, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Withdraw the thumbs.

4. Carry the thumbs under the intermediate strings and pick up on their dorsal sides the radial little finger strings and draw them back under to position.

5. Carry the thumbs over the radial index strings and pick up on their dorsal sides the ulnar index finger strings and carry them back over to position.

6. Withdraw the little fingers.

7. Carry the little fingers over the intermediate strings, pick up on their dorsal sides the proximal ulnar thumb strings and carry them back to position, so that the proximal thumb loops are carried off on the little fingers through the distal thumb loops and the thumbs are slipped out of their proximal loops.

8. Carry the middle fingers over and pick up on their dorsal sides the radial index finger strings.

9. Withdraw the thumbs and extend the fingers between the middle and the little fingers by turning the palms out. This may be continued indefinitely by dropping all but the index and little finger loops and repeating from No. 3. (See fig. 19.)

#### KOOI U'A

1. Make a double loop and drop it over the wrists, so that the crossing of the string lies on the radial side of the wrists.

2. With the palmar sides of the little fingers, from the distal side pick up the distal ulnar wrist string.

3. Holding this with the palmar sides of the little fingers, rotate the hands, palms down, away from the body, thrusting the thumbs between the little finger string and the ulnar wrist string, pick up the ulnar wrist string on the dorsal sides of the thumbs while rotating, and return to position, with the hand following through. There are now loops on the little fingers and thumbs, the latter ones twisted.

4. Remove the little finger loops to the ends of the thumbs.

5. Pass all the fingers from the proximal side up through the thumb loops and let all the strings fall onto the wrists.

6. Repeat Nos. 2 and 3 of this figure, holding with the little finger (in No. 2) the single ulnar string crossing from hand to hand.

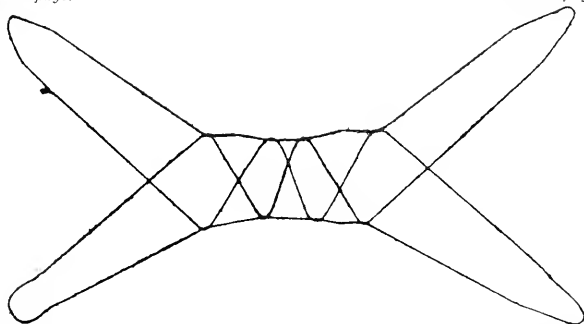
7. With the thumbs from the proximal side, pick up the radial little finger strings.

8. With the middle fingers from the proximal side pick up the proximal ulnar thumb strings.

9. Withdraw the thumbs and extend the figure, palms out. (See fig. 20.)

*Middle finger*

*Middle finger*



*Little finger*

*Little finger*

FIGURE 20.—Sliding figure, *kooi uʻiʻa* (wrist—that is, made on the wrist—lightning), found on Hivaoa.

Open and shut the figure by turning the wrists to the time of the following words, chanted:

Uʻiʻa keapa  
To tutae  
Papakaina  
Te ae o Hina  
Pa!

Brilliant lightning  
For excrement  
Thunders  
The forehead of Hina  
Pa! (The noise of thunder!)

On Uapou, the chant varies somewhat:

Uira kereho  
Ta huihui te au o te mei-e  
Uira-e kereho.

Lightning of different colors  
Turning up the lower side of the leaf of the breadfruit,  
Lightning of different colors.

10. Place the figure on the lap and remove the hands gently.

11. It will be seen that there are in the center of the figure two parallelograms. With the dorsal sides against the lap, slide the little fingers under the lower outer sides of these parallelograms. Continue under the opposite parallel sides and over the top string of the figure. Twist the hands in towards each other so that the palms are down. Pick up the upper string of the figure with the palmar sides of the little fingers and hold. Insert the thumbs into the figure above the lower string and to right and left outside the central parallelograms picking it up on their dorsal sides with a

clockwise rotary movement. The little fingers follow through, holding their string. There are now loops on the little fingers and the thumbs.

12. Repeat Nos. 7, 8 and 9, to form the original figure. This of course may be continued indefinitely.

#### POPO TIKAU

The name of this figure may be translated, "A cluster of flies."

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the index fingers from the distal side, pick up on their palmar sides the ulnar little finger strings, and return in the same rotation, thus twisting the loops on the index fingers.

3. Carry the thumbs over the ulnar index finger strings and pick up on the dorsal side of the thumbs the radial index finger strings, which cross the palms.

4. Rotate the hands away from the body, so that, in returning, the thumbs pass under the radial little finger strings. (See Pl. III, A.)

5. Open and close the figure by bringing the tips of the fingers together and spreading them, to the time of the following words:

*"Tikaue, perere, perere, perere,"* Fly, stretch, stretch, stretch.

(*Perere* also imitates the sound of flies buzzing.)

#### FIGURES MADE BY TWO PERSONS

##### TOHIAU

1. Place the string on each hand so that it passes from the ulnar side of the hand, back of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. Withdraw the little fingers.

4. Pick up the thumb loops onto the ends of the index fingers.

5. Carry the thumbs over the proximal radial index finger strings and pick up on their dorsal sides the ulnar proximal index finger strings.

6. Carry the thumbs over the radial distal index finger strings and pick up on their dorsal sides the distal ulnar index finger strings.

7. Carry the middle fingers over the radial distal index finger strings and pick up on their dorsal sides the radial proximal index finger strings.

8. With the teeth, pick up the proximal radial thumb strings, lift them over the ends of the thumbs and drop them.

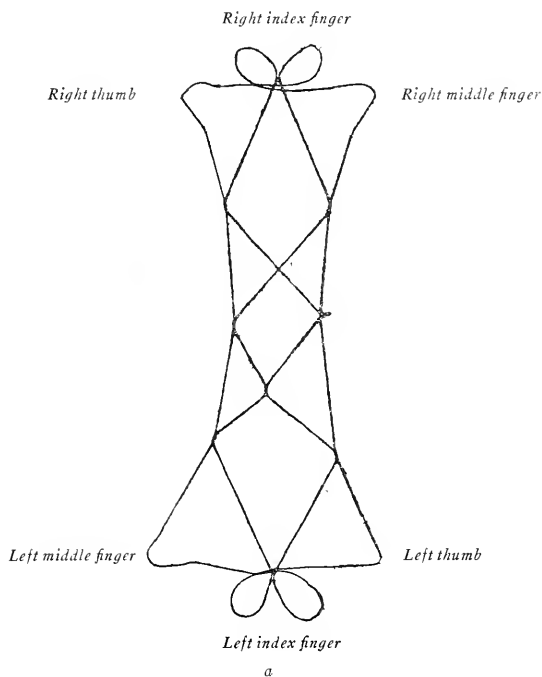


FIGURE 21.—Figure made by two persons, *a*, Tohiau (the name of a legendary hero), found on Hivaoa, Uahuka, Upou, and Nukuhiva; called on Uahuka, *tahe mana* (river-branch overflowing); on Upou, *vai tahe mana* (river-branch flood); on Nukuhiva, *vai na Hakaha'a* (the pool called Hakaha'a in Taipi Valley); *b*, progression from *a*, found on Hivaoa, Uahuka, Upou, and Nukuhiva; *c*, progression from *b*, found on Hivaoa, Uahuka, Upou, and Nukuhiva.

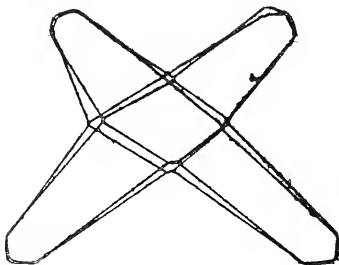
9. Turn the right hand towards the body so that the palm is down. Keep the left palm up. Extend the figure. (See fig. 21, *a*.)

Continue:

10. A second person (B) starting from the bottom of the figure, that is, from the left hand of the player (A), inserts his little fingers towards A

*Right fingers of A*

*Left fingers of A*



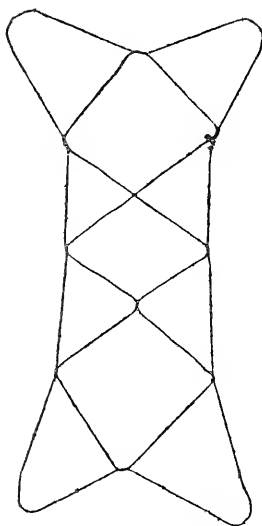
*Left fingers of B*

*Right fingers of B*

*b*

*Right hand of A*

*Left hand of A*



*Left hand of B*

*Right hand of B*

*c*

FIGURE 21.—Continued



into the upper angles of the lowest triangles, palmar side up, and holds them in this position.

11. B then thrusts his thumbs toward A into the upper angles of the second triangles, carries them under the intersecting strings and up into the lowest angles of the third triangles.

12. B now carries his little fingers under the figure (i.e., next the body of A) and thrusts them up into the lowest angles of the top triangles towards himself (B) holding the figure with his little fingers and thumbs in this position while A withdraws his hands from the figure.

13. B extends the figure on his thumbs and little fingers with his palms inward.

14. A now takes off B's little finger loops into his right and left hands respectively with palms up, holding them in all his fingers. B holds his thumb loops in the same fashion. The two work the figure back and forth until a double square appears in the center. (See fig. 21, *b*.)

Continue:

15. The hold is now transferred to the four thumbs of the two players. The other fingers from underneath catch the square sides opposite their respective thumbs and pull them out, at the same time releasing the hold with the thumbs. This is repeated three times, the thumbs retaking the hold before each shift.

16. The hands are now turned palms down, the figure is held from above, the square sides are pulled out from above three times, in a fashion similar to that of No. 15.

17. The figure is now laid on the lap. It will be found that two of the corners are not attached, the upper to the lower loops. In other words, the whole is a single figure, folded over on itself and it is possible for each person to take up two corner loops and stretch the figure out to double its previous length. This figure may be treated exactly as No. 9 and the process may be repeated indefinitely. (See fig. 21, *c*.)

#### VAIPAEE

1. A long loop is placed around the heads of two persons facing each other.

2. Each clasps her hands together, palm to palm, and, with straightened fingers pointing the way, describes an S curve over her right-hand string, under her left-hand string, and back to the center, so that the hands are now between the two strings (which are crossed close to the head to form a loop around it).

3. Each removes this loop from her head in her two hands. With the right hand, she forms a small loop, in the end of this large loop, crossing the left-hand string over the right.

4. Each carries her small loop away from the body to meet the other's

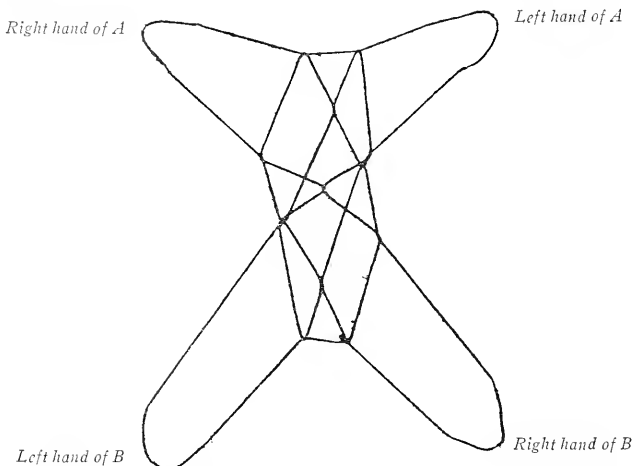


FIGURE 22.—Figure made by two persons: Vaipae (name of a valley on Hivaoa), found on Hivaoa.

in the center of the space between them. One small loop is threaded through the other and returned to its owner.

5. Both small loops are then drawn back towards their respective owners, each having described a U curve. Each small loop is widened by the separation of the two hands holding it, and its two strings are drawn under the respective wrist strings, thus freeing all the hands of all duty, save their hold on a kind of hammock (fig. 22) which is swung up and down, from side to side, to the words:

Vaipae te i una,  
Tahauku te ao.

Vaipae (a valley) is up above,  
Tahauku (a bay) is below.

#### HAHAUA

Two people, A and B, each perform this, facing one another.

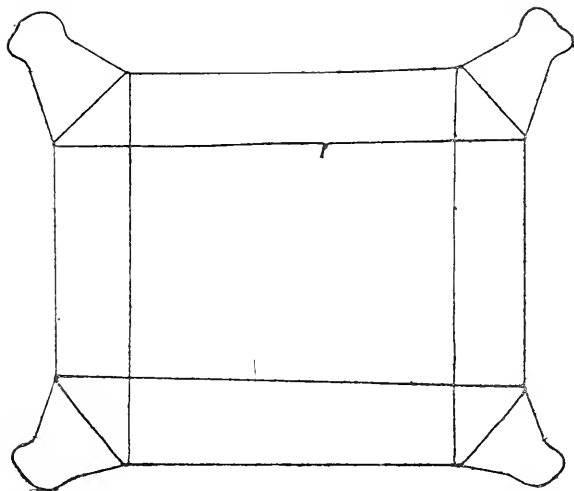
1. Each player places a loop on his hands, so that it passes from the ulnar side of each hand, back of the little finger, between the little and

fourth fingers, across the palm, between the index finger and the thumb, back of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up

*Left hand of A*

*Right hand of B*



*Right hand of A*

*Left hand of B*

FIGURE 23.—Figure made by two persons: *hahaua* (the great ray fish), found on Hivaoa; found also on Maupiti, where it is called *i'a* (fish).

the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string, inside the right index finger loop, and return to position.

3. A thrusts both hands, with all his strings, through the index finger loops of B, from the distal side.

4. B drops his index finger loops off onto the wrists of A, who withdraws his hands, carrying B's index finger loops on his wrists.

5. B thrusts his hands through the index finger loops of A in the same manner.

6. A drops his index finger loops off onto the wrists of B, who withdraws his hands and carries A's loops with him on his wrists.

7. A removes his hands gently from all the loops. B holds his loops

and extends them. A wraps his loops around the extended strings of B and wads them together.

8. A takes the thumb and little finger loops off the left hand of B, holding one loop in each hand.

9. B drops the wrist loop from his left hand, takes off the thumb and little finger loops of his own right hand, holding one loop in each hand, and drops his right-hand, wrist loop as it naturally falls across the figure.

10. The two players extend the figure between them. (See fig. 23.)

#### MATAIKI

The figure is made by two people, A and B.

1. The loop is placed on the left hand of each, along the radial side of the thumb, across the dorsal side of the thumb and index finger and back to the palmar side between the index and middle fingers.

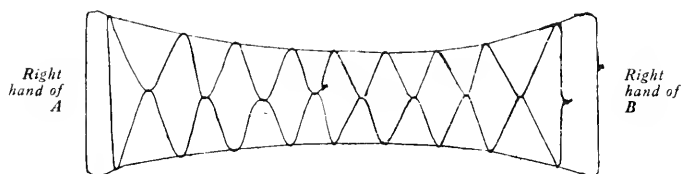


FIGURE 24.—Figure made by two persons: Mataiki (Pleiades), found on Uapou.

2. With the right hand, A carries her ulnar string over the radial string, and again the new ulnar string over the new radial string in a radial rotation.

3. Slipping the thumb and index finger of the right hand into the loop between the two crosses just made, A pushes the crossing nearest her left hand close between the thumb and index finger of her left hand, and lifts the radial string over the tip of the thumb dropping it around its dorsal side, and the ulnar string over the index finger, dropping it around its dorsal side; so that the loop again lies along the radial side of the thumb and the ulnar side of the index finger.

4. A inserts the right hand thumb and index finger into the loop between the hand of B and the other crossing of the loop, pulls the crossing close between the thumb and index finger of her own left hand (A), and drops the radial string over the thumb and the ulnar string over the index finger as before.

5. A continues this process (repeating Nos. 2, 3, 4) until the entire

loop is wound upon her left-hand thumb and index finger, B releasing her hold. B now takes another string (not a loop). A pushes the loops off her thumb, being careful to preserve them; B threads the new string through the thumb loops from the proximal direction; A pushes the index finger loops off in the same manner; B threads the other end of the new string through them from the same direction. The new string is tied, making a new loop; A takes one end; B takes the other; the small loops are opened and stretched along the new one. (See fig. 24.)

## CATCHES AND TRICK FIGURES

## KAMO

1. Place the string on the right hand along the ulnar side of the little finger and around the dorsal side, between the little and fourth fingers,

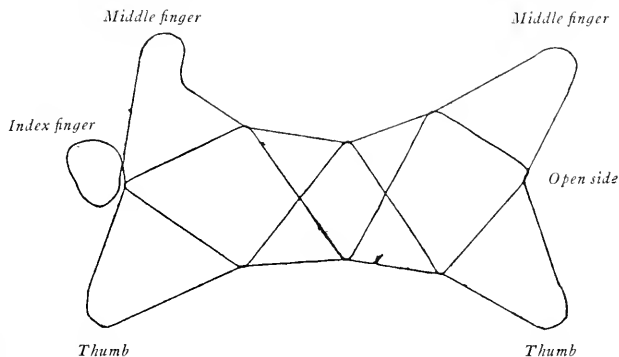


FIGURE 25.—A catch figure, *kamo* (thief), found on Hivaoa.

across the palm, between the thumb and index finger, around the dorsal and radial sides of the thumb.

2. With the palmar side of the left index finger, coming from the distal direction, pick up the palmar right string and pull it out.

3. Repeat No. 2.

4. Place the free end of the loop on the left hand as in No. 1.

5. Pick up on the dorsal side of the left index finger, the right palmar string, and carry it back to position.

6. On the right hand, pick up from the proximal side the radial, little finger string on the dorsal side of the thumb.

7. On the left hand, carry the thumb over the intervening string and pick up the ulnar index finger string on the dorsal side of the thumb.

8. On the right hand, pick up the proximal, ulnar, thumb string on the dorsal side of the middle finger.

9. On the left hand, pick up the radial, index finger string on the dorsal side of the middle finger.

10. On both hands, pick up the proximal, radial thumb loops and lift them over the ends of the thumbs, and drop them between the thumbs and index fingers.

11. Withdraw the little fingers. Extend the figure. (See fig. 25.)

12. With this figure, one catches a thief (*kamo*). Ask someone to thrust his hands into the central diamond and to try to escape to right or left as he wishes. He will find one end closed, the other open, when he pulls against the sides of the figure. If he goes to the closed side, he is *kamo*; if to the open, he is an honest man.

#### KOEE

The meaning of this figure is: To slip through the fingers like an eel.

Hold a loop in the left hand (side 1 of the loop towards the body; 2, away from it). Insert the right hand into the loop and with clockwise rotation go down under 2 and return, picking it up on the wrist. Then bring the right hand in between the body and 1 and up under this string into the loop. Pull the right hand out and the loops fall off it.

#### ANOTHER TRICK FIGURE

1. Double the loop. Place it on the right hand in the following manner: between the thumb and index finger, across the dorsal side of the hand, around the ulnar side of the little finger.

2. With the left hand, pick up the dorsal, right-hand string and draw it through to the palmar side, lifting it over the ends of the middle and fourth fingers, so that one double string now lies across the palm, encircles the index and little fingers and returns to the palmar side of the hand.

3. Still holding the free end of the loop in the left hand, give it a half-twist in the ulnar direction and carry it back between the index finger and the thumb of the right hand, around the dorsal and radial sides of the thumb. The ulnar, index finger string is now the distal thumb string; the radial, little finger string is now the proximal thumb string.

4. With the left hand, carry the proximal thumb string across the palm, between the fourth and little fingers, around the dorsal side of the little finger, and along the ulnar side to the palmar side of the hand.

5. With the left hand, carry the distal, radial, thumb string across the palmar side of the index finger, between the index and middle fingers back to the dorsal side of the hand.

6. With the left hand, carry the distal, ulnar, little finger string across the palmar side of the right hand and between the thumb and index finger to the dorsal side of the hand.

7. With the left hand, lift both the loops off the right thumb and pull them out towards the body.

8. Carry these loops between the middle and fourth fingers to the dorsal side of the right hand. Drop them.

9. With the left hand, pull out the free, double string crossing the right palm. The strings drop off the right hand.

### THREE DIMENSIONED FIGURES

#### FA'E PAPA

*Fa'e Papa* is the legendary house of Atanua, the first woman, the wife of Atea, which is located under the sea at the foot of Atuona Valley.

1. With the left hand, wind one string of the loop five times in an ulnar direction around the right wrist.

2. Hold the ulnar wrist string with the thumb and index finger of the right hand.

3. With the left hand make a loop in the string coming from the right thumb and index finger around all the right hand fingers, turning in the ulnar direction, and holding the string (where it crosses itself) between the tips of the thumb and index finger.

4. Thrust the left hand fingers from the proximal side into this right hand loop on the dorsal side of the hand, and pull out the double loop just made to the extent of the remainder of the string.

5. Hold down with all the right-hand fingers the double palmar right-hand strings.

6. With the left hand, pull the right wrist loops, one at a time beginning with that one highest on the arm, over the right hand and down onto the double loop.

7. Hold the other end of the long loop with the left hand.

8. Space the crossing strings regularly.

9. Separate the double strings crossing the top of the figure by thrusting the thumbs and index fingers under them in ulnar and radial directions, respectively, and up between them, holding them apart on the dorsal sides of these digits. By turning the triangle on its side, the house appears. (See Pl. II, A.)

## TE FA'E NO TONAHEI

*Te fa'e no Tonahei* depicts the house of Tonahei, a legendary heroine.

1. Place the loop over both wrists, circling their dorsal sides.
2. Rotating in the ulnar direction, pick up the ulnar, left-wrist string with the palmar side of the right little finger, then the ulnar right-wrist string with the palmar side of the left little finger, taking care to pick up the latter outside the former and to draw them out to position simultaneously.
3. Twist the right, little finger loop one full rotation in the radial direction.
4. From the proximal direction, pick up the radial, little finger strings on the dorsal sides of the thumbs.
5. With the right index finger from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.
6. Thrust each hand up through its own index finger loop from the proximal direction, so that this loop falls upon the wrist.
7. Pick up the radial, little finger strings on the dorsal sides of the thumbs.
8. Rotate the index fingers in the radial direction over all the ulnar thumb strings, into both the thumb loops, pick up on the index fingers the proximal, ulnar, thumb strings, continue the rotation, so that the proximal, ulnar, thumb strings lie around the dorsal sides of the index fingers and all the loops drop off the thumbs.
9. From the proximal direction, thrust the thumbs up into the index finger loops and take them off onto the thumbs.
10. With the right hand, pick up the two strings on the left wrist and lift them over all the finger tips, except the thumb. Bring them down between the thumb and the index finger, so that they lie around the dorsal side of the thumb, carry them across the palm and in between the fourth and little fingers, so that they lie around the dorsal side of the little finger and along the ulnar side of the hand.
11. Repeat on the right hand.
12. Rotate the index fingers in an ulnar direction, into the little finger loops, pick up on their palmar sides the radial, little finger single strings, carry these along, continuing the rotation under the distal, ulnar, thumb strings, and pick these up. Continue the rotation to position, up through the distal, thumb loops; pull out, so that both the thumbs continue their hold and the index fingers have double loops.
13. Withdraw the little fingers.



14. Thrust the little fingers up from the proximal direction into the index finger loops and take these off onto the little fingers.

15. Rotating the index fingers in the ulnar direction, from the distal direction pick up on their palmar sides the distal, radial, little finger single strings. Continue the rotation; from the proximal direction pick up on the dorsal sides of the index fingers the proximal, ulnar, thumb strings of the smallest thumb loops. Continue to position. (The strings picked up are the loose strings crossing each other in the center of the figure.)

16. Withdraw the thumbs gently and insert them from the proximal direction into the index finger loops alongside the index fingers. Spread the fingers, holding the completed triangular figure (a house) on the thumbs, index, and little fingers. (See Pl. II, *B*.)

## STRING FIGURES FROM THE SOCIETY ISLANDS

## STATIONARY FIGURES

## FIFI RAU APE

1. Place the loop on each hand so that it passes along the ulnar side of the hand and the dorsal side of the little finger, between the little and

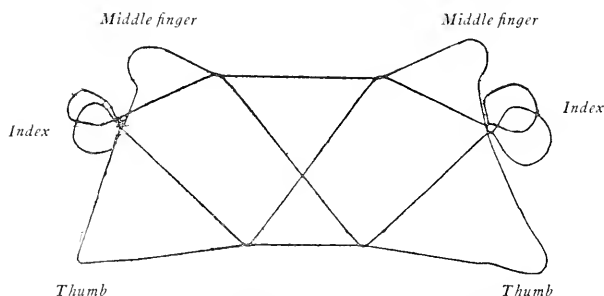


FIGURE 26.—String figure, *fifi rau ape* (plait of *ape* or *Arum costatum* leaves), found on Borabora, Tahiti, and Moorea.

fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Withdraw the thumbs.

4. Thrust the index fingers into the little finger loops from the proximal side and take them off onto these fingers.

5. Carry the thumbs over the proximal radial index finger strings and pick up on their dorsal sides the proximal ulnar index finger strings, and pull them out.

6. Carry the thumbs over the distal radial index finger strings and pick up on their dorsal sides the distal ulnar index finger strings and pull them out.

7. Carry the middle fingers over the distal radial index finger strings and pick up on their dorsal sides the proximal radial index finger strings.

8. With the mouth, lift the proximal thumb loops over the tips of the thumbs and drop them.

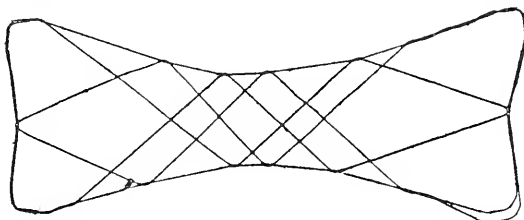
9. Extend the figure on the thumbs, index, and middle fingers. (See fig. 26.)

## RURUTU

1. Place the loop on each hand so that it passes along the ulnar side of the hand and the dorsal side of the little finger, between the little

*Index finger*

*Index finger*



*Fourth and little fingers*

*Fourth and little fingers*

FIGURE 27.—String figure, Rurutu (name of an island), found on Maupiti and Huahine.

and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Carry the thumbs under the intermediate strings and thrust them up into the little finger loops from the proximal side; rotate the thumbs in the ulnar direction down and up to position, carrying off the ulnar little finger strings.

4. Withdraw the little fingers.

5. Carry the middle, fourth, and little fingers under the index finger loops and catch the double ulnar thumb strings and pull them down against the palms.

6. Thrust the thumbs up into the index finger loops from the proximal side and pull out the radial index finger strings on their dorsal sides.

7. With the mouth lift the double proximal thumb strings over the distal thumb strings, over the tips of the thumbs, and drop them.

8. Turn the index finger loops over onto the thumbs, so that the thumbs enter them from the distal side, and take them off.

9. Thrust the index fingers into the double loops of the fourth and little fingers in the direction towards the body, and under the double strings which cross the middle of the figure horizontally. Pick up these latter on the dorsal sides of the index fingers and pull them out.

10. Withdraw the thumbs and extend the figure. (See fig. 27.)

#### A MAHARA RAIATEA

1. Place the loop on each hand so that it passes along the ulnar side of the hand and the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the

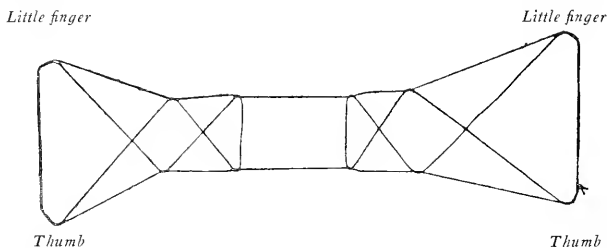


FIGURE 28.—String figure, *a mahara Raiatea* (to divide Raiatea into fours, referring to the division of that island into two groups of four clans each), found on Raiatea and Maupiti.

thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. This move is made four times, first by the right hand, then by the left hand: Carry the thumb over the intermediate strings and pick up on its dorsal side the radial little finger string, drawing it back to position; with the mouth lift the proximal thumb loop over the distal thumb string and over the tip of the thumb, and hold there; slip the little finger out of the figure, leaving its loop on the thumb, and thrust it from the distal side into the loop held by the mouth. Thus the loops of the thumb and little finger are exchanged, one through the other, and the thumb loops twisted half a turn.

4. When this transfer has been accomplished four times on each hand, withdraw the index fingers, letting their loops hang.
5. Thrust the little fingers into the thumb loops from the proximal side and take them off onto these fingers.
6. Thrust the thumbs from the proximal side into the double little finger loops. Do not withdraw the little fingers, but spread the little fingers and the thumbs so as to extend the figure on them. (See fig. 28.)

## A MAHARA TARAVAO

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and

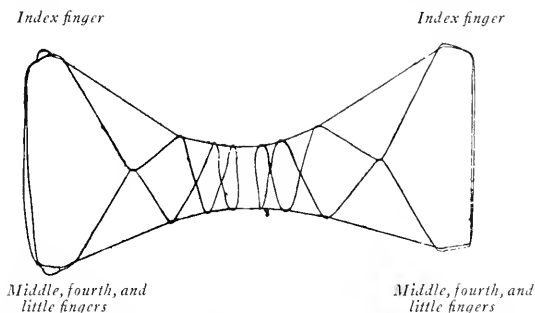


FIGURE 29.—String figure, a *mahara Taravao* (to divide *Taravao* into four), found on Tahiti.

fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Carry the thumbs over the index finger strings and under the radial little finger strings, thrust them up into the little finger loops from the proximal direction, take them off onto the thumbs, and carry them back to position.

4. Carry the little fingers over the index finger loops, over the distal thumb loops, thrust them down into the proximal thumb loops from the distal direction, pick up on their dorsal sides the proximal radial thumb

strings, carry them over the distal thumb loops, over the tips of the thumbs and back to position, thus taking the proximal thumb loops off onto the little fingers first drawing the distal thumb loops through them.

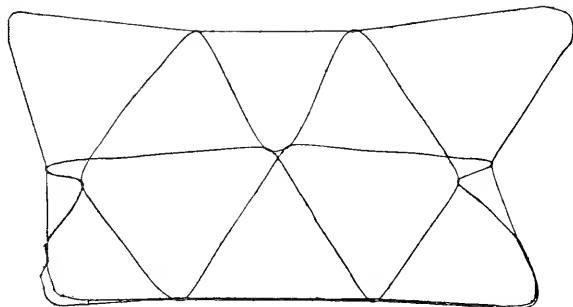
5. Repeat No. 3.
6. Repeat No. 4.
7. Repeat No. 3.
8. Repeat No. 4.
9. Repeat No. 3.
10. Repeat No. 4.
11. Repeat No. 3.
12. Withdraw the index fingers, and let the loops hang.
13. From the distal direction thrust all the fingers into the thumb loops, remove the thumbs, and extend the figure by pressing what were the ulnar thumb strings against the palms with the middle, fourth and little fingers, and by raising the index fingers carrying what were the radial thumb strings. Straighten the vertical loops of the figure with the thumbs. (See fig. 29.)

#### OPAH

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little

*Index finger*

*Index finger*



*Fourth and little fingers*

*Fourth and little fingers*

FIGURE 30.—String figure, *opahi* (axe), found on Tahiti.

and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. From the distal direction thrust the index fingers down into the little finger loops; continue the rotation, carrying the little finger loops off on the index fingers and back to position.

4. Bend the middle, fourth and little fingers down over all ulnar index finger strings and press them against the palms.

5. Thrust the middle fingers up into the thumb loops from the proximal direction and take them off onto these fingers.

6. Thrust the thumbs into the middle finger loops from the distal direction, and under the proximal radial index finger strings to pick these up on the dorsal sides of the thumbs and draw them out. (The strings picked up are those crossing to the bottom of the figure from the index fingers).

7. Withdraw the middle fingers, thrust them again into the thumb loops from the proximal direction, and take the thumb loops off onto them.

8. Thrust the thumbs again into the middle finger loops from the distal direction, withdraw the middle fingers.

9. Pull the thumb loops back toward the palms, thrust the thumbs under the ulnar index finger strings so as to pick them up on the dorsal sides of the thumbs and draw them through the thumb loops.

10. Withdraw the index fingers and extend the figure on thumbs and fourth fingers, thumbs at the top of the figure.

11. Thrust the index fingers into the figure in the direction towards the body entering the triangle, two legs of which are made by the distal and proximal ulnar thumb strings.

12. Withdraw the thumbs and extend the figure on the index and the fourth and little fingers. (See fig. 30.)

#### RAAU TARAVA

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal side, pick up the left palmar string and return to position. With the left index finger, from the proximal side, pick up the right palmar string inside the right index finger loop, and return to position.

3. Carry the thumbs under the intervening strings to pick up on their dorsal side the radial little finger strings, and carry these back under the strings between to position.

4. With the thumb and index finger of the opposite hand lift the

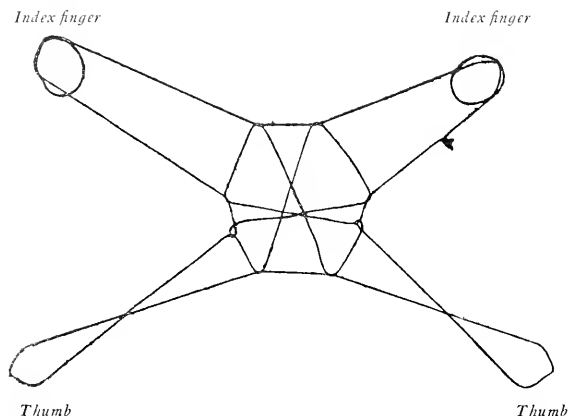


FIGURE 31.—String figure, *raau tarava* (wood laid across), found on Tahiti.

proximal radial string of each thumb over the tip of the index finger and twist it once about that finger in an ulnar direction.

5. With the thumb and index finger of the opposite hand, lift the proximal loop of each index finger over the tip of that finger and drop it.

6. Withdraw the little fingers.

7. Withdraw the thumbs, thrust them again through the same loops, this time from the opposite side, that is, in a direction away from the body; pick up on the dorsal sides of the thumbs the hanging loops just dropped from the little fingers, and draw these through the thumb loops to position on the thumbs.

8. Extend the figure on the thumbs and index fingers by turning the palms out. (See fig. 31.)

#### MOUA PUTA

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb,



around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

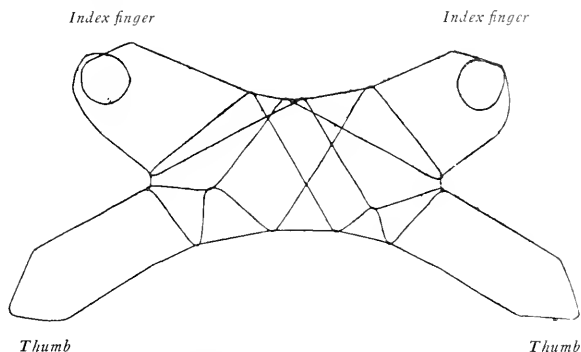


FIGURE 32.—String figure, *Mona Puta* (Hole Mountain, the name of a mountain on Moorea, through the peak of which is a hole supposedly pierced by the spear of an ancient hero), found on all the Society Islands; called in Tautira on Tahiti, *te puta Fai Ami*, after the name of a hole in the ridge above that valley.

3. Rotating the thumbs, index fingers, and little fingers in the ulnar direction, twist all the loops once.

4. Pass the thumbs under the intervening strings and pick up on their dorsal sides the radial little finger strings and carry them back under to position.

5. Lift the proximal radial thumb strings over the tips of the thumbs and over the tips of the index fingers, and wrap them a full turn in the ulnar direction about the tips of the index fingers.

6. Withdraw the little fingers and the thumbs gently, leaving their loops hanging. Thrust the thumbs again into their old loops, this time from the opposite direction—away from the body—pick up the hanging little finger loops on the dorsal sides of the thumbs and pull them through the thumb loops, which fall off.

7. Lift the proximal ulnar index finger strings over the tips of the index fingers and let them drop.

8. Extend the figure, palms out. (See fig. 32.)

## TE IVI O TUNA

1. Place the loop on each hand so that it passes along the ulnar side of each hand and the dorsal side of the little finger, between the little finger and the fourth finger, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. Carry the right index finger across to the opposite hand, descend from the distal side and thrust it between the palmar string and the palm of the left hand, pick up the palmar string on the palmar side of the

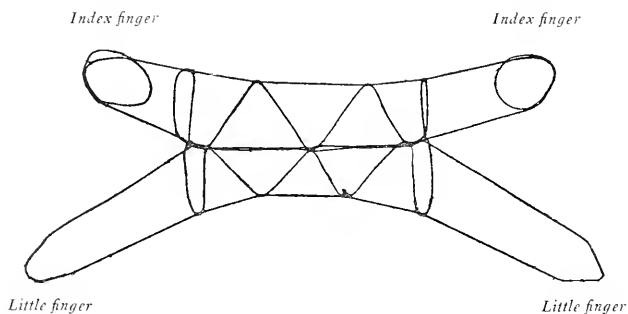


FIGURE 33.—String figure, *te ivi o tuna* (the bone of an eel), found on Raiatea and Maupiti.

right index finger and carry it back to position, twisting the string by rotating the finger in a clockwise direction.

3. Thrust the left index finger into the right index finger loop from the distal side and between the palm and the palmar string, pick up the right palmar string on the palmar side of the left index finger and carry it back to position, rotating in the counter-clockwise direction.

4. Rotate the thumbs, the index fingers, and the little fingers one full rotation each in the ulnar direction.

5. Carry the thumbs over the intermediate strings, enter the little finger loops from the proximal side, pick up the radial little finger strings on the dorsal sides of the thumbs and carry them back to position.

6. With the opposite hand pick up each radial proximal thumb string, carry it over the tip of the thumb and index finger and wind it once around the index finger in an ulnar direction.

7. Withdraw the thumbs and the little fingers, allowing their loops to hang; thrust the thumbs again through their loops but from the opposite

side (i. e., in a direction away from the body), catch the little finger loops on the dorsal sides of the thumbs and draw them back through the thumb loops.

8. Pick up each proximal index finger loop with the opposite hand, lift it over the tip of the index finger and drop it.

9. Turn the palms out and extend the figure on the little and index fingers. (See fig. 33.)

#### UA TE TIARE

1. Place the loop on each hand so that it passes along the ulnar side of each hand and the dorsal side of the little finger, between the

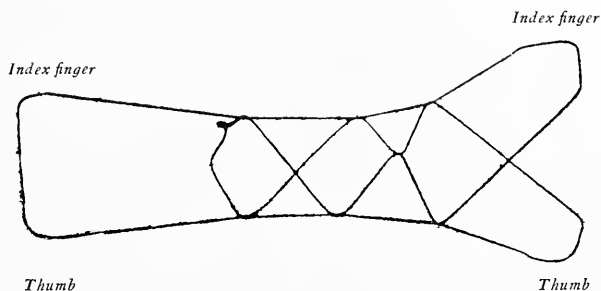


FIGURE 34.—String figure, *ua te tiare* (blossoms the tiare flower), found on Raiatea and Borabora. The sudden final extension of the figure represents the opening of the flower.

little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger pick up on its palmar side the left palmar string, descending upon it from the distal side; rotate this finger a half turn in the clockwise direction, and return to position.

3. Withdraw the right little finger.

4. Rotate the right index finger in an ulnar direction, catch the ulnar index finger string on the thumb and hold it out; continue the rotation of the index finger, under the ulnar thumb string, up into the thumb loop, picking up the ulnar thumb string on its dorsal side and carrying it back to position.

5. Slip the thumb with its loop from under the radial index finger string and draw back to position.

6. Repeat Nos. 4 and 5 three more times.
7. Withdraw the little finger of the left hand.
8. Slip the index finger into the loop with the thumb and extend the figure on these. (See fig. 34.)

## MO'O

1. Place the loop on each hand so that it passes along the ulnar side of each hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb,

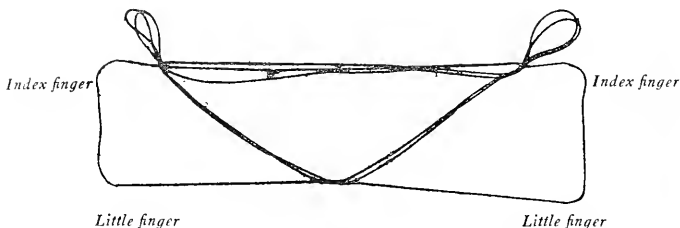


FIGURE 35.—String figure, *mo'o* (lizard), found on Raiatea, Maupiti, Borabora, and Huahine, called *mo'o miti* (sea lizard) on Huahine.

around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Carry the index fingers over the intermediate strings and pick up on their dorsal sides the ulnar little finger strings.

4. Thrust the index fingers up into the thumb loops from the proximal side and take them off onto the index fingers.

5. Rotating the index fingers in the ulnar direction, pick up on their palmar sides the radial little finger strings and continue the full rotation to position.

6. Thrust the thumbs into all index finger loops from the distal side and take them off onto the thumbs.

7. Rotate the index fingers in the ulnar direction, pick up on their palmar sides the ulnar little finger strings; carry the index fingers over and into the thumb loops from the distal side, reverse the rotation to the radial

direction, and pick up on their dorsal sides the double ulnar thumb strings, continuing the rotation back to position.

8. Withdraw the thumbs.

9. Rotate the index fingers in the ulnar direction into the little finger loops from the distal side, and pick up on their palmar sides the radial little finger strings. Continue the rotation back to position.

10. Thrust the thumbs into the double index finger loops from the proximal side, and stretch the thumbs and index fingers apart.

11. Withdraw the little fingers and hold the figure with palms up.

12. There is now an M in the center of the figure. From the proximal side thrust the little fingers up, catch the central legs of the M, and pull them down.

13. Move the thumb and index finger of each hand together, withdraw the index fingers, pull the figure tight on thumbs and little fingers, thus knotting the loops on the thumbs.

14. Withdraw the thumbs, letting these loops hang, and thrusting the thumbs into the large loops of the little fingers, extend the figure on thumbs and little fingers. (See fig. 35.)

#### PATAUTAU

The hanging loops are supposed to be the testicles of the lizard, and are spoken of in the following *patautau* or metrical chant:

Te mo'o, te mo'o  
Haere a miti te hua o teina ore  
Aita mau e miti me taratara  
Tau a roero  
A pau ta roero.

#### PROGRESSING FIGURES

##### FIRI RAU ANANI

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Drop the loops from the thumbs.

4. With the palmar side of the right index finger pick up the ulnar right little finger string, and, continuing the clockwise rotation, return with it to position, so that the string runs from the ulnar side of the

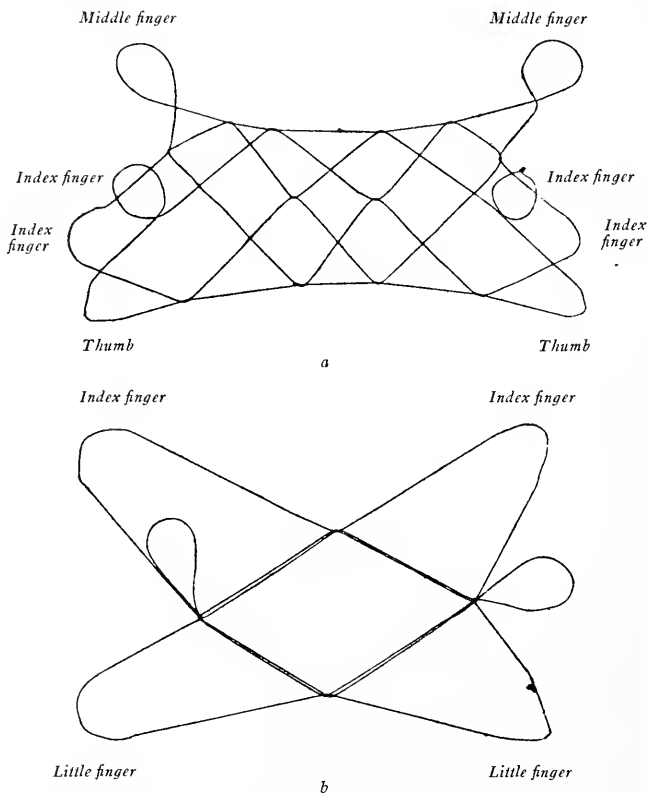


FIGURE 36.—Progressive string figure: *a*, *firi rau anani* (plait of orange leaves) probably the most widely distributed, found in the Society Islands, and the basis of many others in the leeward islands; *b*, *mo'o tuaraha* (lizard back), progression from *a*, found on Maupiti; *c*, *ipu tiare* (flower bowl), progression from *a*, found on Borabora and Maupiti; *d*, *honu tane* (male turtle), progression from *c*, found on Borabora and Maupiti, also a progression from an independent figure called *honu vahine* found on Tahiti; *e*, *honu vahine* (female turtle), progression from *d*, found on Borabora and Maupiti; also an independent figure found on Tahiti.

little finger, across the palmar side of the four fingers, around the radial, dorsal, and ulnar sides of the index finger, and across to the ulnar side of the opposite hand.

5. Pick up this distal radial string of the right index finger on the

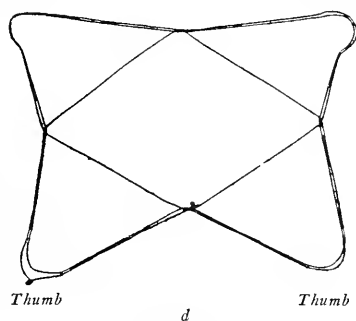
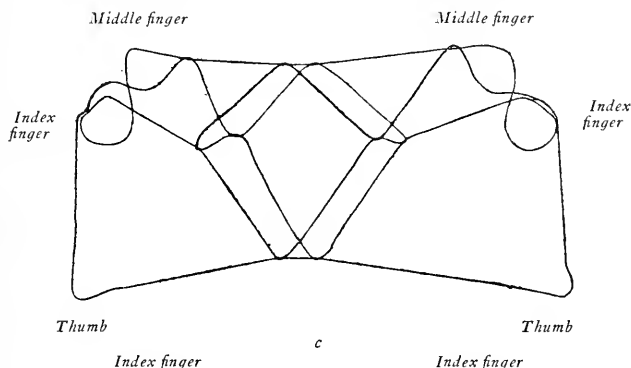


FIGURE 36.—Continued

dorsal side of the left index, entering the index finger loop from the proximal direction; draw hands apart to position.

6. Pass the thumbs under the index finger loops and through the little finger loops from the proximal direction; pick up the radial little finger strings on the dorsal sides of the thumbs and draw them back across the palms to position.

7. Pick up the distal radial index finger strings on the dorsal sides of the thumbs and pull out to position.

8. With the mouth (or more dextrously with the fingers) lift the proximal thumb loops over the distal thumb loops and over the tips of the thumbs, and drop them.

9. Withdraw the index fingers from their distal loops.

*Middle finger*

*Middle finger*

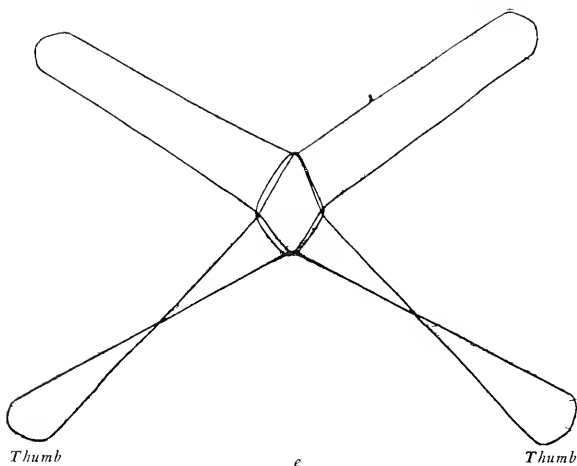


FIGURE 36.—Continued

10. Thrust the index fingers into the thumb loops from the proximal direction and take them off the thumbs onto the index fingers.

11. Repeat No. 6.

12. Repeat No. 7.

13. Repeat No. 8.

14. Bend the middle fingers over the ulnar index finger strings and thrust them under the proximal radial index finger strings, picking these up on the dorsal sides of the middle fingers and carrying them back to position.

15. Withdraw the little fingers from the figure.

16. Extend the figure by turning the palms outward. (See fig. 36, a.)

Continue for:

#### MO'O TUARAHĀ

17. Holding the figure (No. 16) with palms up, thrust the little fingers up from below into the central diamond of the figure, catch on



their palmar sides the strings forming the lower sides of this diamond (towards the player) and the strings next and parallel to them—that is, two strings on each little finger. Pull these down, so that the little fingers may slip under the radial boundary string of the figure and pick it up on their dorsal sides. Rotate the little fingers in an ulnar direction so as to carry this crossing string over the strings originally caught by the little fingers and into the central diamond.

18. Withdraw the fourth fingers.

19. Withdraw the thumbs and extend the figure.

20. Thrust the thumbs into the central diamond of the figure in the direction away from the player, and hold out the figure so as to withdraw the index and middle fingers.

21. Carry the index fingers over the ulnar little finger strings and pick them up on their palmar sides; carry these strings over the double ulnar thumb strings, rotate the index fingers down into the thumb loops from the distal side, continue the radial rotation of the index fingers a full turn back to position, so that they carry off the double ulnar thumb strings on their dorsal sides.

22. Withdraw the thumbs.

23. Rotate the index fingers one full rotation in the radial direction, twisting the double loops.

24. Carry the thumbs under the intermediate strings and up into the little finger loops from the proximal side, picking up the radial little finger strings and carrying them to position.

25. Thrust the thumbs into the index finger loops from the proximal side and pull out on their dorsal sides the radial index finger strings.

26. With the mouth lift the proximal thumb loops over the tips of the thumbs and drop them.

27. Withdraw the little fingers.

28. Hold the figure with palms up, catch the oblique strings which cross from the center of the bottom of the figure on the palmar sides of the little fingers and pull them down.

29. Withdraw the index fingers and extend the figure, which is similar in appearance to the *mo'o* of Raiatea. (See fig. 36, *b*.)

#### IPU TIARE

17. Beginning again with *firi rari anani* (No. 16), withdraw the thumbs and pick up on their dorsal sides the radial index finger strings left hanging. Extend the figure on the thumbs, index and middle fingers. (See fig. 36, *c*.)

Continue for:

#### HONU TANE

18. Lay the figure on the lap. Thrust the thumbs and index fingers into the figure at the lateral points of the central diamond, so that the strings passing to right and left from these points lie between these digits. Carry these fingers under the double strings and up into the central diamond. Extend the figure on the thumbs and index fingers. (See fig. 36, *d*.)

Continue for:

#### HONU VAHINE

19. Lay the figure on the lap again. Thrust the index fingers into the figure just above the side points of the diamond, and the thumbs just below the side points. Carry these digits under the bounding strings of the central diamond as before and up into the central diamond. Extend the figure on the thumbs and index fingers. (See fig. 36, *e*.)

On Maupiti, the following *patautau* is recited with this figure:

Honu-e, honu-e, a puha  
A hani aita tou paraha  
E ti raha au paraha.

Turtle, turtle, come up to breathe!  
Do not caress his back,  
He sleeps upon his back.

#### HONU VAHINE

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal side, pick up the left palmar string and return to position. With the left index finger, from the proximal side, pick up the right palmar string inside the right index finger loop, and return to position.

3. Carry the thumbs over the radial index finger strings and pick up on their dorsal sides the ulnar index finger strings.

4. Carry the middle fingers over the radial index finger strings and pick up on their dorsal sides the proximal ulnar thumb strings.

5. Withdraw the thumbs.

6. Carry the thumbs over the radial index finger strings, under the ulnar index finger strings and the radial little finger strings, pick up on their dorsal sides the ulnar little finger strings, and draw them back to position through the index finger loops.

7. Withdraw the little fingers.

8. Slip the index fingers out and extend the figure on the thumbs and middle fingers.<sup>11</sup>

Continue for:

#### HONU TANE

9. Lay the figure on the lap, removing the hands entirely.

10. Entering the figure with the thumbs and index fingers—in the direction towards the lap—the thumbs into the loops formerly on the thumbs, the index fingers into the loops formerly on the middle fingers—carry the thumbs and index fingers under the sides of the diamond in the center of the figure and up into the diamond. Extend the figure by spreading the thumbs and index fingers.<sup>12</sup>

Continue:

11. Again lay the figure on the lap and withdraw the hands.

12. Entering the figure again in the direction towards the lap, thrust the thumbs into the loops formerly on the thumbs and the index fingers into the loops formerly on them, carry them under the strings forming the sides of the central diamond and up into the diamond. Extend the figure by spreading the thumbs and index fingers. This is again *honu vahine*. Nos. 9, 10, 11, 12 may be repeated indefinitely.

#### TE TUMU O TE PAPA

1. Place the loop on each hand so that it passes along the ulnar side of each hand and the dorsal side of the little finger, between the little and the fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Thrust all fingers up from the proximal side through the index finger loops so that these fall upon the wrists.

4. Thrust the index fingers into the little finger loops from the distal side, pick up the radial little finger strings on their palmar sides, carry these over the ulnar thumb strings, enter the thumb loops from the distal

<sup>11</sup> The completed figure is identical with figure 36, *e*.

<sup>12</sup> The completed figure is identical with 36, *d*.

side with the index fingers, pick up the ulnar thumb strings on their dorsal sides, and continue the rotation to position.

5. Withdraw the thumbs.

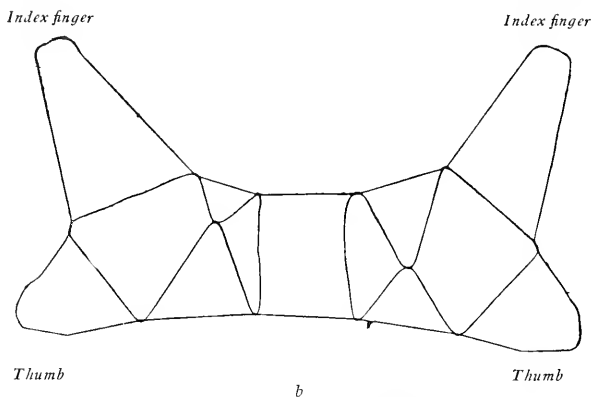
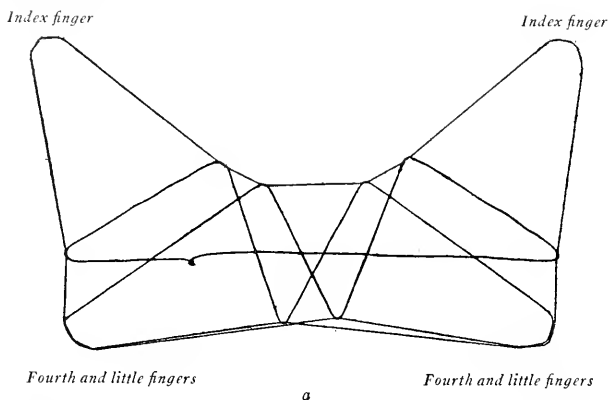


FIGURE 37.—Progressive string figure: *a*, *te tunu o te Papa* (the basic rock level referred to in the creation chants), found on Raiatea, Borabora, and Maupiti; *b*, *vahia* (broken!), progression from *a*, found on Borabora, Raiatea, and Maupiti.

6. Move the index finger loops to the thumbs, entering them from the proximal side.

7. Pick up each dorsal wrist string with the opposite hand, carry it

over the index, middle, and fourth fingers, and drop it around the thumb and the little finger and across the palm.

8. Pick up the radial little finger strings, which cross to the center of the figure, on the palmar sides of the index fingers carry them over the ulnar thumb strings, which cross from hand to hand, and, continuing the rotation of the index fingers pick up on their dorsal sides these ulnar thumb strings and carry them up to position.

9. Withdraw the little fingers.

10. Thrust the middle, fourth, and little fingers, from the proximal side, into the thumb loops and take the hold with them, withdrawing the thumbs. Turn the palms out and extend the figure. (See fig. 37, *a*.)

Continue for:

#### VAHIA

11. Thrust the thumbs, in a direction away from the body, into the loops held by the middle, fourth, and little fingers, pick up on their dorsal sides the string crossing the center of the figure, and pull it towards the body. Hold it thus, while saying the following words:

#### PATAUTAU<sup>13</sup>

Te hia e Nono-ra?  
E ra ia tei tea au—  
Roaroa tei tea au,  
I te potopoto te ramarama-ra—  
I te i'a rii na tana,  
Taihoa tane.  
Te tumu o te papa  
Vahia!

Where is Nona?  
Gone is she to the reef—  
Long that reef,  
On the short reef the torch—  
For a little fish for us two,  
Dear lover.  
The basic rock level  
Broken!

12. Upon saying the word, *vahia*, withdraw the little fingers and extend the figure upon the thumbs and index fingers. (See fig. 37, *b*.)

On Maupiti, the *patautau* chanted is longer and tells the story more completely :

O Hina te vahine  
Monoi-here te tane.  
Au ae i raro!  
Eita hoi au  
E au atu i raro.  
A pau hoi au  
I te taihai niho roa  
Ia Nona.  
Tehia Nona?  
E ra roa  
Te ti au i te roaroa,  
Te ti au i te potopoto  
Te ramarama ra i te arii

Hina is the woman  
Monoi-here is the man  
Jump far down!  
Not I  
Will jump far down.  
Finished am I  
By the wild long teeth  
Of Nona.  
Where is Nona?  
Gone far  
To the long reef,  
To the short reef.  
The torches of the arii (chiefs)

<sup>13</sup> The words refer to the story of Nona, an ogress who used to go to the reef with her torch at night to fish. During her absence her daughter, by reciting a certain *patautau*, or metrical chant, caused the rock foundation to open so that her lover could come out to see her.

Na taua rae  
Ta'u hoa here!  
Te tumu, te tumu o te papa.  
Vahia!

?  
My loved dear!  
The basic rock level.  
Broken.

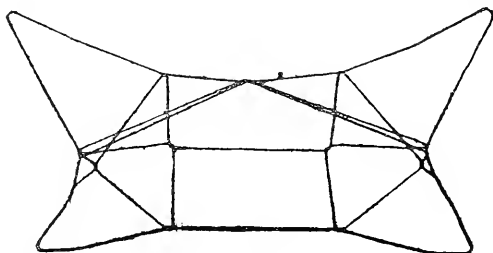
## APOO MAHAI AHAANA

*Apoa mahai ahaana* means "great hole for breadfruit paste."

1. Place the loop on each hand so that it passes along the ulnar side of the hand and the dorsal side of the little finger, between the little and

*Index finger*

*Index finger*



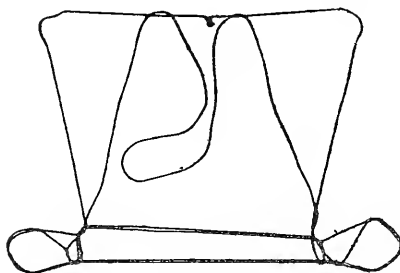
*Fourth finger*

*Fourth finger*

*a*

*Thumb*

*Thumb*



*Fourth and little fingers*

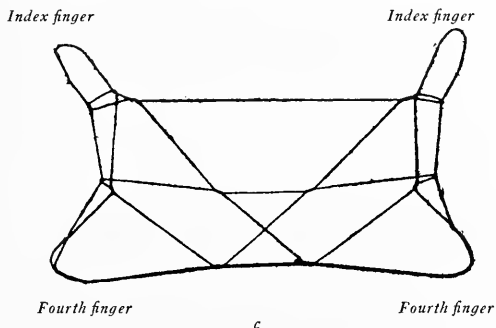
*Fourth and little fingers*

*b*

FIGURE 38.—Progressive string figure: *a*, *na ofai rorao i hamau* (a stone on Maupiti), progression from figure called *apoo mahai ahaana* (Pl. III, B), found on Maupiti and Borabora; *b*, *tairi raa o te hope Ori* (the flying around of the back hair of Ori, a legendary hero whose back lock flew about when he turned his head), progression from *a*, found on Maupiti, Borabora and Huahine, called on Huahine and Borabora, *na vahine here uu* (the women catch the *uu*, or shell fish); *c*, *na mau arii o Opoa* (the binding of the chiefs of Opoa), another progression from *apoo mahai ahaana* (Pl. III, B), found on Maupiti and Borabora.

fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand (*e fai*).

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger,



from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position (*e tui*).

3. Rotate the index fingers a full turn in the ulnar direction, entering the little finger loops from the distal side and carrying off the radial little finger strings on them (*e pana*).

4. Withdraw the little fingers (*e tu'u*).

5. Thrust the middle, fourth, and little fingers into the index finger loops from the distal side, and, catching the ulnar index finger strings on their palmar sides, pull them down against the palms (*e taume*).

6. Thrust the middle fingers into the thumb loops from the proximal side and take these loops off onto them (*iriti*), withdrawing the thumbs (*e tu'u*).

7. Thrust the thumbs into the middle finger loops from the distal side, and under the proximal radial index finger strings, so as to pick up the latter on the dorsal sides of the thumbs (*e pana*) and pull them through the middle finger loops. (See Pl. III, B.)

Continue for:

#### NA OFAI ROROA I HAMAU

8. Withdraw the middle fingers and thrust them into the thumb loops from the proximal side (*iriti*), at the same time withdrawing the thumbs (*e tu'u*).

9. Thrust the thumbs into the middle finger loops from the distal side, pull these loops back over the double palmar strings, catch these double strings on the dorsal sides of the thumbs (*e pana*), and pull them through the loops just taken from the middle fingers. Withdraw the index fingers (*e tu'u*).

10. Thrust the index fingers into the figure, towards the body, and into the small triangles at the upper right and left corners of the figure, which lie between the distal and proximal thumbs' strings. Withdraw the thumbs (*e tu'u*).

11. With the free fingers pick up the horizontal strings which cross to the center of the figure midway between the top and the bottom. Uncross them in the center by pulling the right-hand string over the other and towards the left, and the left-hand string under the other and towards the right. This forms a central aperture just under an inverted triangle and it is into this opening that the thumbs must be thrust in a direction away from the body and over the apex of the triangle, so as to pick up on their palmar sides the double strings just pulled out. Carry these on the thumbs over the radial index finger strings, so that the thumbs may pick up on their dorsal sides (*e pana*) these latter strings and pull them through the double loop. Withdraw the index fingers at the same time, and thrust them into the thumb loops towards the body, withdrawing the thumbs. (See fig. 38, a.)

Continue for:

TAIRI RAA O TE HOPE ORI

12. Thrust the index fingers into the thumb loops from the proximal side and take them off onto these fingers (*iriti* or *e tu'u*).

13. Thrust the thumbs under the middle section of the string which crosses the figure horizontally and midway between the top and bottom, and pull it out on the dorsal sides of the thumbs and over the radial index finger strings, so that the thumbs may pick up these latter on their dorsal sides (*e pana*) and pull them through the thumb loops. Withdraw the index fingers at the same time (*e tu'u*).

14. Thrust the index fingers into the thumb loops from the proximal side and take them off onto these fingers (*iriti* or *e tu'u*).

15. Thrust the thumbs under the strings which cross the fourth and little finger loops and which lie nearest these fingers, pull them out on the dorsal sides of the thumbs (*e pana*). Thread the right thumb loop through the left thumb loop, and thrust the thumbs into the exchanged loops in the direction away from the body, so that they catch hold with their palmar sides.



16. Thrust the thumbs into the index finger loops from the proximal side and pull out the radial index finger strings on the thumbs (*e pana*).

17. With the mouth lift the proximal radial thumb strings over the distal thumb strings and over the tips of the thumbs and drop them (*e iti*).

18. Withdraw the index fingers and thrust them up into the thumb loops from the proximal side, taking them off on these fingers (*e tu'u* or *iriti*).

19. Thrust the thumbs under the strings, which cross the index finger loops and which lie nearest these figures, and up into the index finger loops. Pull out the crossing strings on the dorsal sides of the thumbs (*e pana*); thrust the thumbs up into the index finger loops from the proximal side and pull out the radial index finger strings on their dorsal sides (*e pana*); with the mouth lift the proximal thumb loops over these radial index finger strings, over the tips of the thumbs, and drop them (*e iti*).

20. Withdraw the index fingers and thrust them into the thumb loops from the proximal side, and take them off onto these fingers (*e tu'u*).

21. Carry the right thumb under the double strings which cross horizontally and form the bottom of the figure, catch on its palmar side the two strings which cross each other in the center of the figure on the other side, that is, the side away from the player, and pull these strings down (*e taume*) and around the bottom of the figure to form a large loop on the side towards the player. Thrust the left thumb into this loop from the proximal side, withdraw the right thumb and thrust it again into this loop, but also from the proximal side this time.

22. Pull this double loop of the thumbs out over the radial index finger strings, so as to catch the latter on the dorsal side of the thumbs (*e pana*) and pull them through the double loops.

23. Withdraw the index fingers and thrust them into the thumb loops from the proximal side, taking them off onto these fingers (*e tu'u*).

24. Thrust the thumbs up under the horizontal string which crosses the middle of the figure on the side towards the player, and pull it out on the dorsal sides of the thumbs over the radial index finger strings, so as to catch these on the dorsal sides of the thumbs (*e pana*) and pull them through the thumb loops, and withdraw the index fingers (*e tu'u*).

A long loop flies around the upper horizontal string of the figure. This is the flying lock of Ori. (See fig. 38, b.)

On Borabora where this figure is known as *na vahine here uu* (the women catch the uu), the following *patautau* is recited with it:

Na vahine rii,  
Na vahine rii

Two women,  
Two women

Here uu,  
Titipoa,  
Atoti.

Catch the uu  
Titipoa (mountain birds),  
Atoti (small fish).

Other words concerning these two women run:

Na vahine rii,  
Na vahine rii  
Patote.  
Te rama i te miti  
Tetei.  
Te rama i te pape  
Pipio.

Two women.  
Two women  
Slide.  
The torch on the sea  
Appears over the water.  
The torch on the river.

Huahine gives the same name to this figure, but there is an added line in the *patautau*:

A horo orua i te miti

Run you two to the sea.

Continue the figure for:

#### VAHIA

25. Let the flying loop drop from the bottom of the figure. Pull it around on the outside of the figure and over the top string, so that the thumbs can catch it on the inside (body side) of the figure (*taviri*).

26. Pull this loop out on the dorsal sides of the thumbs over the radial index finger strings, so that the thumbs may pick up the latter on their dorsal sides (*e pana*) and pull them through the former. Withdraw the index fingers at the same time (*e tu'u*).

27. Thrust the thumbs into the index finger loops below the central crossing string and pull it out on the dorsal sides of the thumbs (*e pana*).

28. Withdraw the fourth and little fingers (*e tu'u*) and extend the figure. At this, the figure dissolves or is broken (*vahia*), with only a simple figure remaining.

#### NA MAU ARII O OPOA

Another version diverges slightly after the tenth move:

11. Thrust the thumbs under the legs of the central inverted triangle at the top of the figure and pull them out on their dorsal sides over the radial index finger strings, so that the thumbs may enter the index finger loops from the proximal side, pick up the radial index finger strings on their dorsal sides (*e pana*), and pull them through the thumb loops. Withdraw the index fingers at the same time (*e tu'u*) and thrust them towards the body into the thumb loops, withdrawing the thumbs. (See fig. 38, c.)

## SLIDING FIGURES

## U TAMI

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the

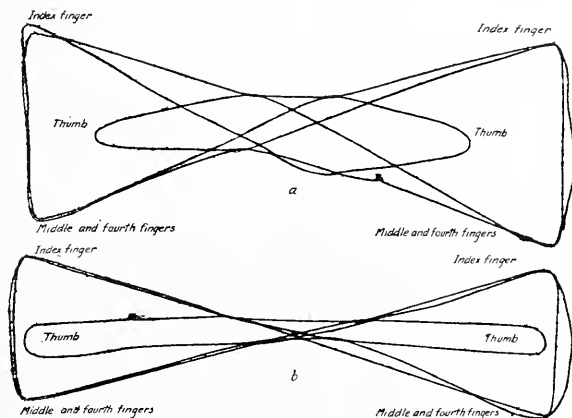


FIGURE 39.—Sliding figure: *u tami*, figure found on all the Society Islands; called *hi ami* on Raiatea, Maupiti, and Borabora: *a*, the figure open and extended; *b*, closed by pulling the thumb loops.

thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Pass the thumbs under the index finger loops and up into the little finger loops from the proximal direction; take off the little finger loops onto the thumbs and carry them back under the index finger loops.

4. Thrust the thumbs up into the index finger loops from the proximal direction and take these loops off onto the thumbs.

5. Bend the index fingers over the distal ulnar thumb strings enter this most distal thumb loop from the distal direction, thrust the index fingers under the two proximal ulnar strings on each thumb, and pick

these up on the dorsal sides of the index fingers. Extend the figure on thumbs and index fingers.

6. With the middle and fourth fingers take hold of the two ulnar strings on each index finger and draw them down to the palms. Turn the palms out. (See fig. 39, *a* and *b*.) Pull the figure to and fro with the thumbs in time to the following words:

U tami, u tami,  
U tami huruhuru,  
Te mea o te vahine.  
O fa!  
Paina, paina,  
Te fare tuo oro.  
O fi!

#### U TAMI PAOTI

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around

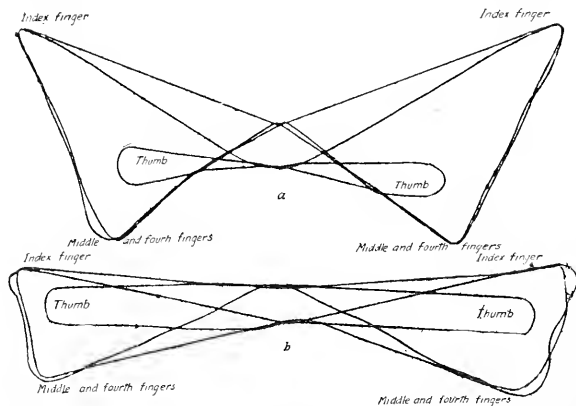


FIGURE 40.—Sliding figure: *u tami paoti* (scissors), figure found on Moorea, Tahiti, and Raiatea: *a*, figure open and extended; *b*, closed by pulling the thumb loops.

the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. Turn the hands within the loop palms out, so that the hold is on the little fingers and the thumbs are free within the loop between them; with the little fingers as pivots, rotate the thumbs in full clock-wise rota-

tion over the ulnar little finger strings, picking these up on their dorsal sides and returning to position with palms facing each other. The string is now twisted about both thumbs and little fingers and lies across the palms.

3. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

4. From now on, the play is identical with *u tami*, Nos. 3, 4, 5 and 6 of *u tami* completing it. (See fig. 40, *a, b.*)

## TUARE

1. Place the loop on each hand so that it passes along the ulnar side of each hand and the dorsal side of the little finger, between the

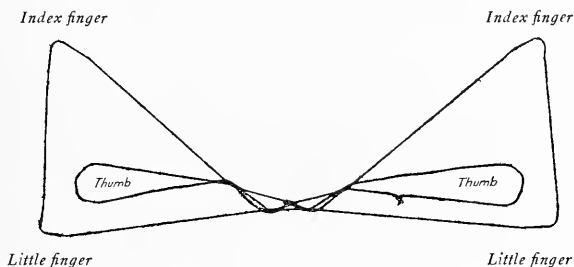


FIGURE 41.—Sliding figure: *tuare* (word signifying bravado, applied to an arm movement in the dance), figure found on Raiatea, Maupiti, and Borabora.

little finger and the fourth finger, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop and return to position.

3. Carry the thumbs under the intermediate strings and thrust them up into the little finger loops from the proximal side; rotate them in the ulnar direction down and up to position, picking up on their dorsal sides the ulnar little finger strings.

4. Withdraw the little fingers.

5. Thrust the middle, fourth, and little fingers up into the index finger

loops from the proximal side, catch the radical index finger strings and pull them down against the palms.

6. Rotate the index fingers in the radial direction, enter the thumb loops from the distal side, pick up on their palmar sides the double ulnar thumb strings, carry these strings through the index finger loops, which drop off. Continue the full rotation back to position.

7. Withdraw the little fingers.

8. Holding the figure with palms up, thrust the little fingers up into the central diamond, catch both the lower strings running obliquely from the center to the sides of the figure, and pull them down; rotate the little fingers in an ulnar direction so as to pick up on their dorsal sides the single lower string crossing from radial thumb to radial thumb, and carry it over the oblique strings and into the central diamond.

9. Withdraw the thumbs.

10. Thrust the thumbs up from the proximal side under the radial index finger strings which cross to the center of the figure, and pull back.

11. Withdraw the index fingers.

12. Thrust the index fingers from the proximal side into the little finger loops, and extend these loops on the index and little fingers. (See fig. 41.) Turn the palms out and pull the thumb loops in and out while saying the following words:<sup>14</sup>

Tuare-re-re  
Te pae avae-vae  
Tuare, tuare  
Tatara hiti te avae  
Tairi e hia to avae

Tuare [an arm movement of bravado]  
The marching on [of the waves]  
Tuare, tuare  
Agile the legs  
Beaten the legs

#### TAATA INO

1. Place the loop on the left hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, and along the radial side of the hand.

2. With the right index finger from the distal side catch the left palmar string and pull it out on the palmar side of the index finger.

3. Repeat No. 2.

4. From the distal side thrust the right hand down into the long hanging loop, catch the left ulnar little finger string with the palmar side of the right little finger and the left radial thumb string with the palmar

<sup>14</sup> These are the words of a fisherman standing on the reef, over which great waves are breaking, marching on. They may beat against his agile legs, but they are powerless to dislodge him, and he moves his arms in defiance—*tuare-re-re*.

side of the right thumb, and pull these two strings up through the long loop.

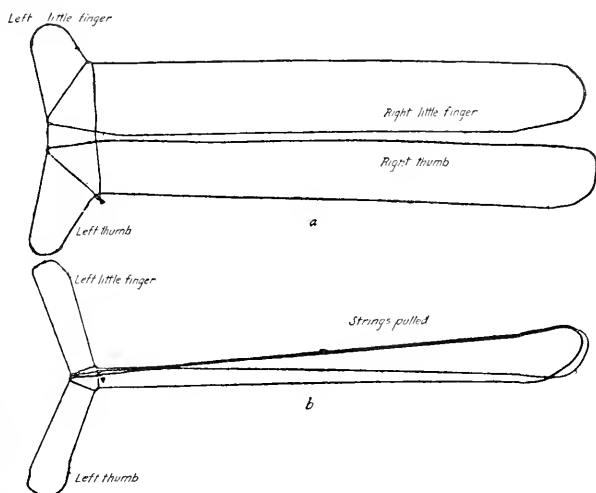


FIGURE 42.—Sliding figure: *taata ino* (bad man), figure found on Borabora: *a*, figure open; *b*, the figure closed by pulling the central strings.

5. Work the figure by pulling the two central strings in and out. (See fig. 42, *a* and *b*.)

#### FIGURES MADE BY TWO PERSONS

##### MA'O

1. A long loop is placed around the heads of two persons, A and B, facing each other.

2. Each clasps her hands together, palm to palm, and with straightened fingers pointing the way describes an S curve—over her right-hand string, under her left-hand string, and back to the center—so that the hands are now between the two strings (which have been crossed close to the head to form a loop about it).

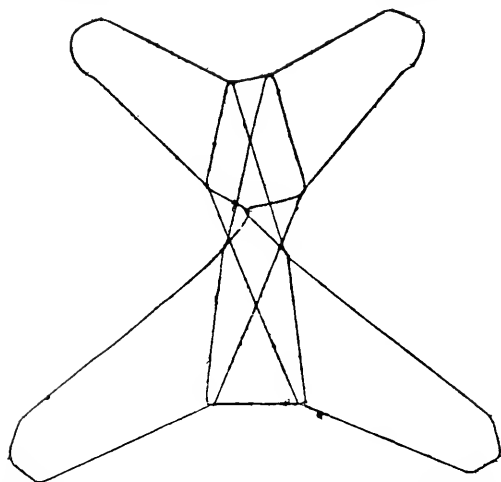
3. Each person removes this loop from her head, holding it in her

two hands; and in its end forms a small loop by crossing the left hand side of the string over the right.

4. Each one passes her small loop to the other person. Loops are

*Right hand of A*

*Left hand of A*



*Left hand of B*

*Right hand of B*

FIGURE 43.—Figure made by two persons: *ma'o* (shark), figure found on Raiatea, Maupiti, Huahine, and Borabora; called on Huahine *upo'o* (head), in reference to the opening position upon the heads of the two players.

exchanged; not threaded through each other and returned to the original owners, as in the Marquesan Vaipae.

5. Each player pulls her new loop towards her, holding it between thumb and index finger of each hand, widening the loop by separating her hands; and she draws it back through the loops lying on her wrists, so that the wrist strings fall off, and the finished figure is spread between the two players. (See fig. 43.)

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb,



around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.

2. With the right index finger, from the proximal side, pick up the left palmar string and return to position. With the left index finger,

*Right hand of B*

*Left hand of B*

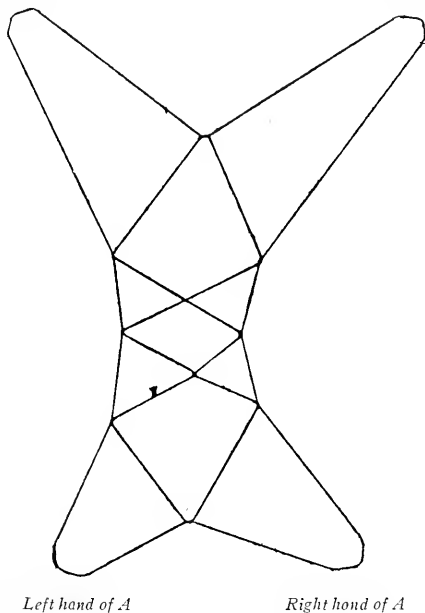


FIGURE 44.—Figure made by two persons: *ioio* (a kind of fish), figure found on Tahiti, Raiatea, and Maupiti.

from the proximal side, pick up the right palmar string inside the right index finger loop, and return to position.

3. Withdraw the little fingers.

4. Carry the index fingers under the ulnar thumb strings, enter the thumb loops from the proximal side, and take them off onto the index fingers.

5. Carry the thumbs over the proximal radial index finger strings, under the proximal ulnar index finger strings and pick the latter up on the dorsal sides of the thumbs, drawing them back to position.

6. Carry the thumbs over the distal radial index finger strings and under the distal ulnar index finger strings and pick these latter up on the dorsal sides of the thumbs, drawing them back to position.

7. Bend the middle fingers over the distal radial index finger strings and under the proximal radial index finger strings, and pick up the latter on the dorsal sides of the middle fingers, drawing them back to position.

8. Extend the figure vertically, turning the right palm down and the left palm up.

9. A second person (B) is necessary to complete the figure. She enters it with the four fingers of both hands from the distal side by thrusting them into the side triangles of the figure in regular succession from the bottom up and from the little fingers to the index fingers. This player extends the figure horizontally by separating her hands, there being a loop on each of her eight fingers.

10. The first player (A) withdraws her hands gently, and takes hold of the little finger loops of the second, one in each hand.

11. Player B then slips all her fingers, save the index fingers, from their loops, and takes hold of these in either hand, drawing the figure out in rough imitation of the shape of a fish, the head in the hands of one player, the tail in the hands of the other. (See fig. 44.)

#### CATCHES AND TRICK FIGURES

##### TUNA RIRO

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.

2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.

3. Withdraw the right hand from all the loops and let them hang.

4. With the right hand pick up the left index finger string on the dorsal side of that finger, pull it over the finger tip and away from the left hand to the full extent of the loop. The string now lies on the left hand twisted about both thumb and little finger and crossing the palm.

5. Take the right hand hold on the other end of the loop as in No. 1.

6. With the right index finger, from the proximal direction, pick up the left palmar string and return to position.

7. Pass the right thumb over the radial index finger string and under the ulnar index finger string, picking the latter up on its dorsal side and drawing it back.

8. From the proximal direction pick up the radial little finger string of the left hand with the left thumb and draw back.

*Middle finger*

*Middle finger*

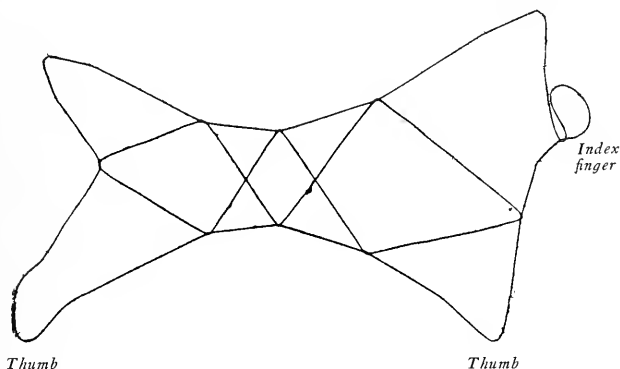


FIGURE 45.—A catch: *tuna riro* (the eel is lost, a reference to a waterfall on Moorea, down which an eel has strayed and is caught in a pool), figure found on Moorea and Tahiti.

9. With the right middle finger, from the proximal direction, pick up on its dorsal side the radial index finger string of that hand.

10. With the left middle finger, from the proximal direction, pick up on its dorsal side the proximal ulnar thumb string of that hand.

11. With the teeth pick up the proximal thumb loops of both hands, lift them over the tips of the thumbs and drop them.

12. Withdraw the little fingers from the figure.

13. Extend the figure with palms out. (See fig. 45.)

14. A second person now thrusts his hand into the central diamond of the figure and moves it from side to side in time to the following words:

Tuna riro, tuna riro

I te vai o piripiri

I te vai o parapara

E haere taua na uta—e

Ua po!

The eel strays, the eel strays

To the water of the *piripiri*

[*Cenchrus echinatus*]

To the water of the *parapara*

[*Marattia elegans*].

We will go up above.

It comes night!

At the words "*Ua po*," the second person pulls his hand sharply through the figure at the side held by the left hand of the first person. The figure falls apart on that side.

## AMATARA

1. Place the loop over the little fingers.
2. Carry the thumbs under the little finger loops and on their dorsal sides catch both the ulnar and the radial finger strings and draw them out to position, so that a double string crosses each palm.
3. From the proximal side pick up the left palmar strings on the dorsal side of the right thumb and draw them out to position.
4. From the proximal side pick up the right palmar strings on the dorsal side of the left thumb outside the right thumb loop, and draw them out to position.
5. With the mouth lift the proximal double strings over the distal double thumb strings, over the tips of the thumbs and drop them between the thumbs and index fingers.
6. Tie the figure by pulling the hands apart.
7. Withdraw the thumbs, holding the figure with the little fingers. With the chanting of the following words, the little fingers are pulled apart and the figure dissolves:

Pu, pu, pu, Tamau—e  
Amatara e pone!

## THREE DIMENSIONED FIGURES

## APOO TIOO

This figure also represents a hole in the ground for fermented breadfruit.

1. Place the loop on each hand so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand and across to the opposite hand.
2. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.
3. Rotating the index fingers in the ulnar direction, thrust them from the distal direction down into the little finger loops, and continue the rotation back to position, picking up the radial little finger strings on the palmar

sides of the index fingers and carrying them under the index finger loops and up to position.

4. Withdraw the little fingers from the figure.
5. Pick up all the ulnar index finger strings on the palmar sides of the middle and fourth fingers, and draw them down against the palms.
6. Thrust the thumbs forward into the figure close to the hands into the index finger loops and pick up on their dorsal sides the proximal radial index finger strings. Draw them up through the thumb loops, which fall off. The figure is held thus, with thumbs up, so as to form a triangular "hole" of three dimensions. (See Pl. IV, A.)

#### TE FARE NO ORO

This figure is known as "the house of Oro."

1. Place the loop over both wrists, circling their dorsal sides.
2. Rotating the right hand in the ulnar direction, pick up the ulnar left wrist string on the dorsal side of the right wrist; thrust the left hand from the proximal direction under the distal radial wrist string of the right hand and pull back to position. There are now two loops over each hand.
3. Slip the hands into the distal loops with the usual opening hold, that is, place this loop on both hands so that it passes along the ulnar side of the hand, the dorsal side of the little finger, between the little and fourth fingers, across the palm, between the index finger and the thumb, around the dorsal side of the thumb, along the radial side of the hand, and across to the opposite hand.
4. With the right index finger, from the proximal direction, pick up the left palmar string and return to position. With the left index finger, from the proximal direction, pick up the right palmar string inside the right index finger loop, and return to position.
5. From the proximal direction, thrust each hand up through its index finger loop, so that this loop falls upon the wrist.
6. Rotating the index fingers in the ulnar direction, descend from the distal direction into the little finger loops, pick up the radial little finger strings on their palmar sides, and continue the rotation up over the ulnar thumb strings. At this point reverse the rotation of the index fingers to the radial direction, descend into the thumb loops from the distal direction, pick up on their palmar sides the ulnar thumb strings, draw these through the little finger loops, and, turning the palms out, carry the loops off on the dorsal sides of the index fingers. Withdraw the thumbs.
7. From the proximal direction, thrust the thumbs up into the index finger loops and take them off onto the thumbs.

8. With the right hand, pick up the two strings on the left wrist and lift them over all the finger tips except the thumbs. Bring them down between the thumb and the index finger, so that they lie around the dorsal side of the thumb, carry them across the palm and in between the fourth and little fingers, so that they lie around the dorsal side of the little finger and along the ulnar side of the hand.

9. Repeat on the right hand.

10. Repeat No. 6, up to the point of withdrawing the thumbs. Retain the hold on these.

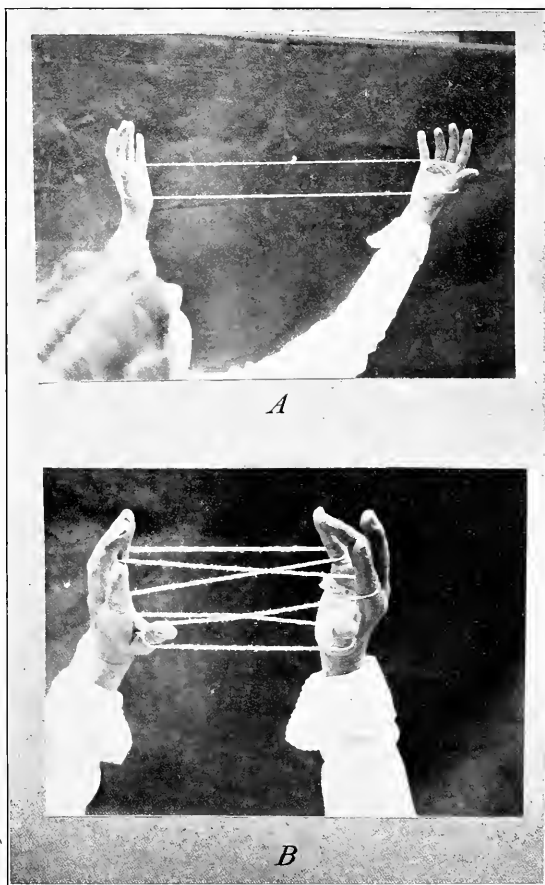
11. Withdraw the little fingers and extend the figure.

12. Thrust the middle, fourth, and little fingers from the proximal direction up into the thumb loops and take the hold with them in withdrawing the thumbs.

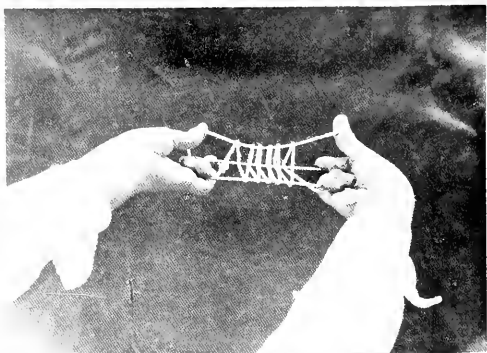
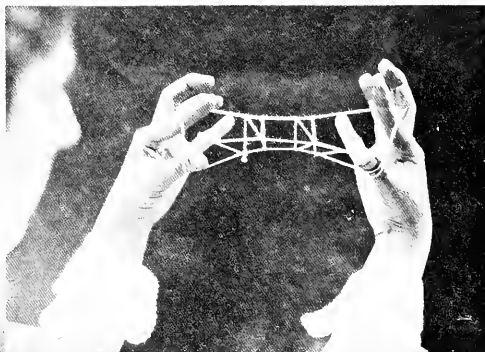
13. It will be seen that there are two strings running from hand to hand, which cross each other in the center of the figure. Thrust the thumbs in the direction away from the body into the loops held by the middle, fourth, and little fingers, pick up both these strings on each thumb on its dorsal side and pull them back towards the body.

14. Withdraw the middle, fourth, and little fingers, and, turning the palms up, stretch out the figure.

15. There is now a single string running from thumb to thumb on the ulnar side. From the proximal direction, thrust the little fingers up, catch this string on their palmar sides and pull it down. Turn this triangular figure on its side and the *fare* or house appears with the double string for the ridge. (See Pl. 1v, B.)

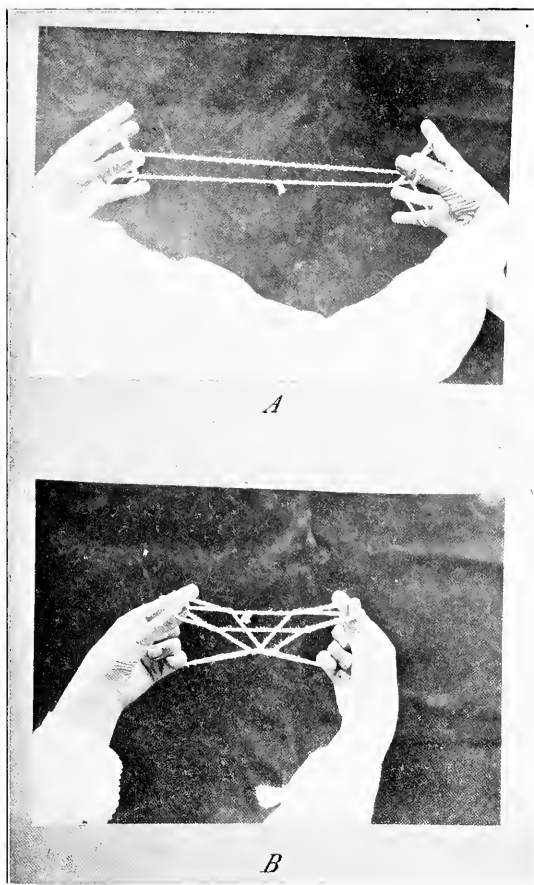


OPENING DESIGNS USED FOR MOST STRING FIGURES IN THE SOCIETY ISLANDS: *A*, THE OPENING POSITION; *B*, THE FIRST MOVE.

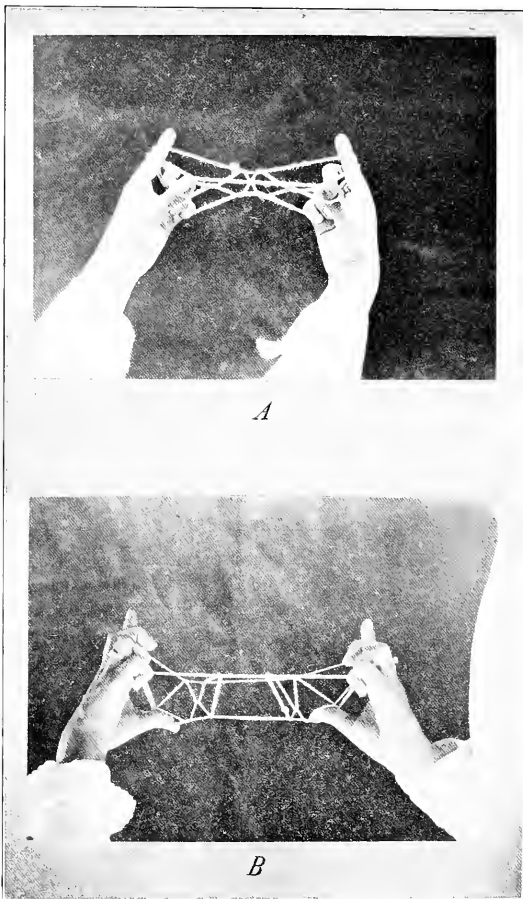
*A**B*

*A*, FA'E PAPA (THE HOUSE OF ATANUA, WIFE OF THE GOD ATEA), A THREE-DIMENSIONED FIGURE OF HIVA OA; *B*, TE FA'E NO TONAHAI (THE HOUSE OF TONAHAI, AN OLD HEROINE) A THREE-DIMENSIONED STRING FIGURE OF HIVA OA AND UAHUKA, CALLED ON UAHUKA TE FA'E POTO (THE HOUSE WITH THE SHORT BACK).

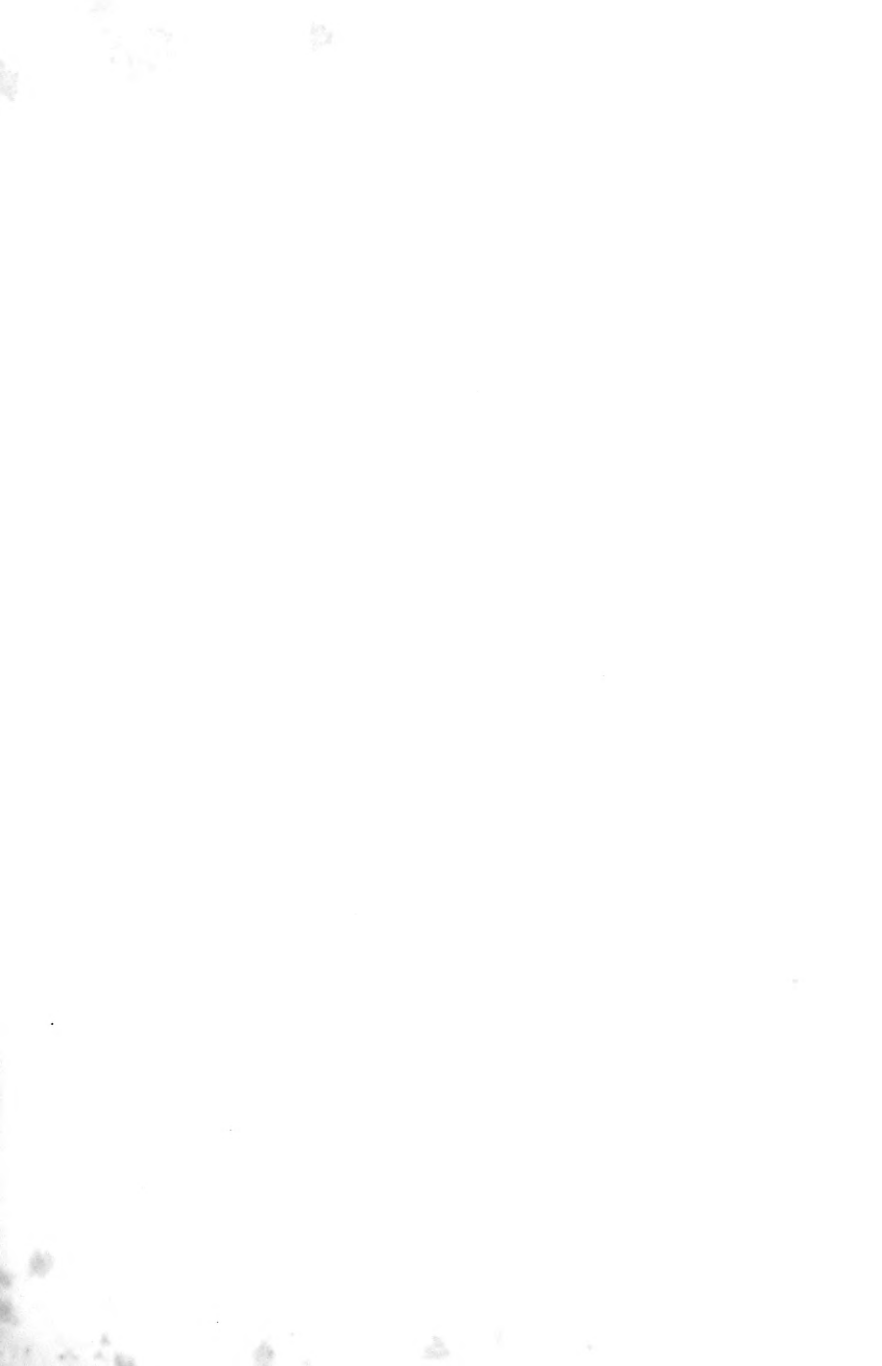




*A*, POPO TIKAE (A CLUSTER OF FLIES), A FIGURE OF HIVAOA;  
*B*, APOO MAHAI AHAANA (GREAT HOLE FOR STORING BREAD-  
 FRUIT PASTE), A THREE-DIMENSIONED FIGURE FOUND ON  
 MAUPITI, BORABORA, AND HUAHINE.



*A*, APOO TIOO (HOLE FOR STORING BREADFRUIT PASTE), A THREE-DIMENSIONED FIGURE FOUND ON MOOREA, TAHITI, RAIATEA, AND BORABORA, CALLED ON RAIATEA, APOO MAHAI, ANOTHER TERM FOR THE SAME OBJECT; *B*, TE FARE NO ORO (THE HOUSE OF THE GOD ORO), A THREE-DIMENSIONED FIGURE FOUND ON RAIATEA, MAUPITI, BORABORA, AND TAHITI, CALLED ON TAHITI SIMPLY, TE FARE (THE HOUSE).











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Figure 1